

A

PRACTICAL SYNOPSIS
OF THE
MATERIA MEDICA.

VOL. II.

CONTAINING

CLASS II. EMOLLIENTS.
CLASS III. ABSORBENTS.
CLASS IV. REFRIGERANTS.
CLASS V. ANTISEPTICS.
CLASS VI. ASTRINGENTS.

CLASS VII. TONICS.
CLASS VIII. STIMULANTS.
CLASS IX. ANTISPASMODICS.
CLASS X. NARCOTICS.
CLASS XI. ANTHELMINTICS.

BY THE AUTHOR OF THE
THESAURUS MEDICAMINUM.

LONDON:

PRINTED FOR C. AND R. BALDWIN, NEW BRIDGE-
STREET; AND FOR JOHN MURRAY, 32, FLEET-STREET.

M DCCC VII.

ADVERTISEMENT.

THE plan of this Synopsis has been particularly described in the first Volume; which, besides the account of Alimentary Substances, contains the first Class of Medicinal Substances, namely Evacuants, subdivided into Errhines, Sialagogues, Expectorants, Emetics, Cathartics, Diuretics, Diaphoretics, and Emmenagogues.

The remaining classes of Medicinal Substances are comprehended in this second Volume, the completion of which has been unexpectedly delayed, from a variety of causes, until the present period.

N. B. This mark ¶ denotes, in the articles to which it is prefixed, inferior efficacy, inertness or superfluity.

London, Feb. 12, 1807.

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A
PRACTICAL SYNOPSIS
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MATERIA MEDICA.
VOL II.—PART I.

N. B. The second part of this volume, which will complete the work, is preparing for the press, and will be published in the course of the ensuing winter.

A
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MATERIA MEDICA.

VOL II.—PART I.

CONTAINING

CLASS II. EMOLLIENTS.		CLASS V. ANTISEPTICS.
CLASS III. ABSORBENTS.		CLASS VI. ASTRINGENTS.
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FOR R. BALDWIN, PATERNOSTER-ROW; AND L. B. SEELEY,
AVE MARIA LANE.

M DCCC II.

ADVERTISEMENT.

SINCE the publication of the first Volume of this work, four years have elapsed. The Author will not detain the Reader with explaining the causes of this interruption; but will rather assign the reasons why he has thus sent forth a part only of the second Volume, without waiting until the whole should be ready for the press. He has been induced so to do by the consideration that if he had withheld this part longer, he should have heightened the displeasure already incurred with the purchasers of the first Volume. If his other engagements have prevented him from bringing the work to a conclusion now, one advantage will result from it; *viz.* more opportunity will be allowed for investigating and determining the powers and uses of some new and not yet fully tried remedies, belonging to the important Classes of Antispasmodics and Narcotics. These, with the Classes of Stimulants, Anthelminthics and Heteroclites, together with some supplementary pages relative to the necessity of altering and amending the

3 the

the Materia Medica conformably to the progress and improvements in Natural History, Chemistry, Physiology, and Clinical Practice,—showing that this branch of medical knowledge is capable of being raised to a pitch of consideration far above that which it has hitherto attained—will make up the remaining part of this volume.

To those who have not purchased the former volume it may be proper to notice, that the plan of the work is there detailed, with the reasons for undertaking it; and that in addition to the Alimentary Substances, that volume contains, Class I. Evacuants, subdivided into eight sections; *viz.* Errhines, Sialagogues, Expectorants, Emetics, Cathartics, Diuretics, Diaphoretics, and Emmenagogues.

This part of the second Volume contains, Class II. Emollients—Class III. Absorbents—Class IV. Refrigerants—Class V. Antiseptics—Class VI. Astringents—and Class VII. Tonics.

As some persons may be dissatisfied with the
suppression

suppression of the Author's name, he wishes it to be understood that it is his intention to affix it to the concluding part of the work.

N. B. This mark ¶ denotes inferior efficacy, inertness, superfluity.

London, April 8, 1802.

TABULAR VIEW
OF
THE CONTENTS OF CLASS II.

EMOLLIENTS.

A. Diluents.

(1) *From the Animal Kingdom.*

Jus Carnis Bubulæ dilutum.
Beef Tea.

Jus Pullinum dilutum.
Chicken Water.

Serum Lactis. Whey.

(2) *From the Vegetable Kingdom.*

Infusum Melissæ. Balm-Tea.

Infusum Theæ. Common Tea.

Decoctum Avenæ. Gruel.

———— *Hordei. Barley Water.*

B. Demulcents.

(1) *From the Animal Kingdom.*

Acipenser Huso. The Isnglas-fish.

Helix Pomatia. The Garden Snail.

Phyfeter Macrocephalus.
The Spermaceti Whale.

(2) *From the Vegetable Kingdom.*

Althæa Officinalis. Marsh-mallow.

Amygdalus Communis. The Almond.

Vol. II.

B. Demulcents.

Astragalus Tragacantha.
Tragacanth or Goats-thorn.

Avena Sativa. The Oat.

Cycas Circinalis. The Sago-Palm.

Glycyrrhiza Glabra. Liquorice.

Hordeum Distichon. Barley.

Iatropa Iamipha. Cassada. Tapioca.

Lichen Islandicus. Iceland Liverwort. Iceland Moss.

Linum Usitatissimum. Flax.

¶ *Malva Sylvestris. Common Mallow.*

Maranta Arundinacea. Indian Arrow-root.

Mimosa Nilotica. Gum Arabic.

Olea Europæa. The Olive.

Orchis Masculula. Salep.

Pyrus Cydonia. The Quince.

Triticum Hybernum. Wheat.

Tussilago Farfara. Coltsfoot.

————

Cera. Wax.

CLASS II.

EMOLLIENTS. A. DILUENTS.

BY Diluents we understand weak, aqueous liquors with various impregnations. In some instances the impregnation is of a nutritious quality, such as the vegetable and animal decoctions hereafter mentioned; in others, it is merely aromatic, as in the instance of various infusions.

When treating of the alimentary properties of Water (Vol. I. p. 96) we noticed the necessity of dilution, to a certain degree, in the business of nutrition; we may here remark, that there is an equal, if not a greater, necessity for it, in the business of healing. On how many occasions do medicines fail of their intended effect, if water be not copiously given with them? This is particularly the case with such medicines as belong to the orders of Cathartics, Diuretics, and Diaphoretics; and it is upon this principle, chiefly, that the beneficial operation of Mineral Waters is to be explained. Of such waters the mineral impregnation is often very slight; but being in a state of

extreme division, aided often by a high temperature, it produces salutary changes upon the diseased body, which could not be effected by the same mineral ingredient administered in larger quantities, but in a less diluted state. See *Saunders on Mineral Waters* 1800.

(1) *From the Animal Kingdom.*

Jus Carnis Bubulæ. Beef-tea. See Vol. I. p. 11.

Jus Pullinum feu Gallinaceum. Chicken Water or Broth. Ibid. p. 27.

Serum Lactis. Whey. Ibid. p. 16.

(2) *From the Vegetable Kingdom.*

Infusum Melissæ. Balm-tea.

Infusum Theæ. Common-tea.

Decoctum Avenæ. Gruel. See Vol. I. p. 72.

Decoctum Hordei. Barley-Water. Ibid. p. 74.

All these preparations are of great use in fevers,
and

and in certain morbid conditions of the intestinal canal and urinary passages; but in many of the above-mentioned cases toast and water (*Infusum panis tost*) or even pure water will answer as well. In the southern parts of Europe and in the warm climates physicians frequently allow no other beverage to their fever-patients for days and even weeks, but common water. Though such a practice followed up, to its full extent, may not suit the ordinary fevers of this climate; yet, as we shall have occasion to remark under *Refrigerants*, it may be adopted in part with the greatest advantage.

To produce the desired effect it is obvious that the above-mentioned liquids must be taken in considerable quantities.

B. DEMULCENTS.

(a) *From the Animal Kingdom.*

ACIPENSER *Huso*. The Hinglas fish. Ichthyocolla. See Vol. I. p. 43, 44.

HELIX *Pomatia*. The Snail. Ibid. p. 48.

¶ Sperma Ceti. Sebum Ceti. A suety substance found in a peculiar cavity existing in the head of a species of whale, termed *Physeter Macrocephalus*. It possesses all the properties of common fat and expressed oils; and, like them, is incorporated with aqueous liquors by means of mucilage of gum arabic or yolk of egg. In this state of combination it is prescribed where the alimentary canal is pained and irritated by its acrimonious contents, or the urinary passages by calculous concretions. We pass over its exhibition in pulmonary affections. Allured by its beautifully white, shining appearance and crystallized form, practitioners have, for a long period of time, given an undue preference to this species of fat: Whereas it possesses no advantages over the

the common expressed oils, which by reason of their fluidity are more readily combined (through the intervention of mucilages) with aqueous vehicles; and which (being kept in vessels better closed) are not so liable to become rancid and nauseating.

(2) *From the Vegetable Kingdom.*

ALTHÆA *Officinalis*. Monadelphia Polyandria. Columniferæ. Indigenous. (Radix. Folia.) Marshmallow. Half an ounce of the root boiled in a pint of water to half a pint, yields a sweetish mucilaginous decoction.

The *Decoctum Althææ*, *Pb. Ed.* is made by boiling marshmallow-root four ounces, raisins stoned, two ounces, in seven pounds of water down to five pounds. The filter'd liquor after standing till it settles is to be poured off for use. A tea-cup full of this, and the preceding decoction, may be given in the same cases in which the almond-milk, decoction of barley and linseed infusion are prescribed. There is a *Syrupus Althææ* both in the Lond. and Ed. Ph. It is prepared by adding to the decoction of the root a sufficient quantity of sugar. It might be dispensed with. The leaves were formerly used in decoctions for
B 4. clysters

clysters and fomentations. In the Lond. Ph. the leaves of the common mallow are substituted in their place.

AMYGDALUS Communis. Icosandria Monogynia. Pomaceæ. Arbor. A native of Africa, but naturalized by cultivation to the Southern parts of Europe. (*Amygdalæ dulces.*) The Almond. Sweet almonds. These kernels, freed from their skins by maceration in hot water, yield, when properly triturated with water, a milky liquor or emulsion. In the *Lac Amygdalæ*, Ph. Lond. an ounce and a half of almonds, and half an ounce of double-refined sugar, are triturated with two pints of water. In the *Emulsio Communis*, Ph. Ed. the blanched almonds are triturated with water alone, in the proportion of one ounce of the former to two pounds and a half of the latter. The almond emulsion prepared with gum arabic of this Pharmacopœia is termed *Emulsio Arabica*, and will be mentioned under the article *Mimosa*. These milky liquors constitute an useful beverage in cases of hectic fever, dysury, (whether excited by cantharides or from other causes) in stone and gravel, and in some affections of the intestinal canal. Tincture of opium is often joined with them. A tea-cup full or more may be taken for a dose.

The

The *Oleum Amygdalæ* may in like manner be incorporated with water by means of gum arabic or any other mucilage; also by means of alkalis. Thus combined it is given in the same cases as the almond emulsion. It is some times given in the form of a linctus, mixed up with conserves, and other saccharine and mucilaginous substances. In some cases of colic, as also where a stone is impacted in the gall duct, it may be given by itself; or only with the addition of laudanum to prevent vomiting, an effect to be guarded against in the colic. Where poisons, especially metallic poisons, have been swallowed, several tea-cups full of this oil may be given, until the stomach is emptied. Lastly, it is occasionally (though not so frequently as olive-oil, which is cheaper) added to emollient clysters.

ASTRAGALUS *Tragacantha*. Diadelphia. Decandria. Papilionaceæ. Southern parts of Europe. Frutex. Succus gummosus e trunco et ramis stillans, sole aëreque exsiccatus. (Gummi tragacanthæ.) Tragacanth or Goat's-thorn. Gum-tragacanth. This gum is less soluble in water than gum arabic, and forms with it a much thicker mucilage; which on this account is better adapted for making dry substances into pills and boluses, and for some other pharmaceutical purposes, than the arabic gum. Its medicinal uses are the same

as those of the *mimosa nilotica*, which see. It is an ingredient in the *Trochisci Amyli* and *Trochisci Glycyrrhizæ*, Ph. Lond. which see under their respective heads. The *Pulvis Tragacanthæ compositus*, Ph. Lond. consists of tragacanth, gum arabic and starch, each one ounce and a half, double refined sugar, three ounces, rubbed together into a powder. Half a drachm or more may be given for a dose. It is sometimes mixed up with syrups into the form of a linctus, and prescribed in catarrhal and phthifical cases. The *Mucilago Tragacanthæ*, Ph. Lond. is made by dissolving with a gentle heat half an ounce of the gum in ten ounces of water. The *Mucilago Gummi Tragacanthæ*, Ph. Ed. is in the proportion of one ounce of the gum to eight ounces of boiling water. After macerating for twenty-four hours, the solution of the gum is promoted by trituration, and is afterwards passed through a linen strainer.

AVENA Sativa. Triandria. Digynia. Gramina. The Oat. The decoction (called *Gruel*) prepared from the seeds freed from their husks (in which state they are termed *Groats* or *Groots*) is an useful demulcent beverage in febrile affections, in cases of cholera and dysentery, and in various disorders of the urinary passages.

CYCAS *Circinalis*. C. *revoluta*. Sago. See Vol. I. p. 86.

GLYCYRRHIZA *Glabra*. Diadelphia Decandria. Papilionaceæ. Southern parts of Europe. (Liquiritia. Radix.) Liquorice. This sweet mucilaginous root is frequently added to decoctions of other demulcent vegetables, and given in hectic and phthifical cases. It is an ingredient in the *Decoctum Hordei compositum*, Ph. Lond. (see Hordeum) and in the *Trochisci Amyli*, Ph. Lond. From the *Succus Spissatus vel Extractum Glycyrrhizæ*, mixed together with an equal quantity of double-refined sugar, and about a seventh part of the whole composition of gum tragacanth (with water enough to form a paste) are formed the *Trochisci Glycyrrhizæ*, Ph. Lond. formerly called *Trochisci Bechici Nigri*. Black pectoral troches. The *Trochisci Glycyrrhizæ*, Ph. Ed. are composed of extract of liquorice, gum arabic, each, four parts, double-refined sugar eight parts. These ingredients are dissolved in warm water and filter'd; the liquor is then evaporated in a gentle heat until it becomes of a consistence proper for forming troches. These are more mucilaginous than the troches of the London Pharmacopœia, which some may deem a sufficient advantage for the additional trouble incurred in their preparation. As their old name denotes, they are designed for catarrhal

and phthifical cafes.—There are moreover in the Ed. Ph. the *Trochisci Glycyrrhizæ cum Opio*, prepared by triturating two drachms of opium with half an ounce of the tincture of balsam of tolu, until the opium is dissolved, and then gradually adding eight ounces of common syrup and five ounces of extract of liquorice, softened with warm water. Whilst the whole is being well mixed together, five ounces of powdered gum arabic are to be gradually added. The mass is then to be dried till it becomes fit for making troches, of which each should weigh ten grains. These are suited to the same cafes as the preceding. *Wedel de Glycyrrhiza.* 1717.

HORDEUM *Distichon*. Triandria Digynia. Gramina. Barley. The decorticated seeds, termed *Pearl Barley* (*Hordeum perlatum*) boiled, in the proportion of two ounces to four pints of water, until this last is reduced to two pints, yield the *Decoctum Hordei*, Ph. Lond. (*Aqua Hordeata*. Barley Water. Decoction of Barley.) In the *Decoctum Hordei*, Ph. Ed. the proportions are two oz. of barley to five pounds of water to be reduced by boiling to one half. In both Pharmacopœias it is directed that the barley be first washed with cold water, and then boiled for a little while in about half a pint of water. This being thrown away, the above-mentioned quantity of boiling water is then

then added. It is given in unlimited quantities, in the same cases as the *Lac Amygdalæ* and *Decoctum Avenæ*.

The *Decoctum Hordei compositum*, Ph. Lond. (*Decoctum Pectorale*) is prepared by boiling in two pints of the (simple) Decoction of Barley and one pint of water, two ounces of raisins, stoned, two ounces of figs, sliced, and half an ounce of liquorice-root, sliced and bruised. The whole is boiled down to two pints, and strained. The quantity of liquorice in this preparation is too inconsiderable to be of any use. It would be an improvement, if the raisins were omitted, and a quadruple proportion of the liquorice added.—It is given in doses of a tea-cup full in phthical and other pulmonic affections, joined with opiates to counteract its laxative effects.

Iatropha Manihot & *I. Janipha* Tapioca. See Vol. I. p. 56.

LICHEN *Islandicus*. Cryptogamia Algæ.—Algæ. Iceland, Lapland, Swisserland, England, and other northern parts of Europe. (*Muscus islandicus*.) Iceland Liverwort. Iceland Moss. This like all the lichens abounds in mucilage; but at the same time it possesses a bitter principle, which should be separated from it before it is administered as a demul-

demulcent; though this principle is desirable where it is given with other intentions, as we shall have occasion to notice under Tonics. It is freed from its bitterness by maceration in warm water for twenty-four hours; after which it is boiled in a fresh quantity of water, in the proportion of one ounce of the lichen to two pints of water, kept on the fire until it is reduced by evaporation to one pint. Of this a tea-cup full is given frequently in cases of hectic fever, phthisis pulmonalis, dysentery, and scurvy. References will be made to writers on this useful vegetable under the class of Tonics.

LINUM Usitatissimum. Pentandria Pentagynia. Gruinales. Indigenous. Supposed by some to have been derived from Egypt (Semen) Flax. From the seeds of this plant, called *linseed*, decoctions and infusions are prepared (in the proportion of half an ounce of the seed to a pint of water) and given in catarrhal and pleuritic affections, in strangury, in stone and gravel, and in colicky and dysenteric conditions of the intestinal canal. The decoction is likewise administered clysterwise; in which case a larger proportion of the seed may be used. To these preparations opium is frequently added. This sort of clyster is very useful in tenesmus and abrasions of the intestines. See *Thesaurus Med.* p. 154. The bruised and boiled seeds

seeds are further used in poultices.—The expressed oil, called *linseed-oil* (*Oleum e seminibus lini*) possesses the same properties and may be used in the same manner as the *Oleum Amygdalæ*. It has been given by itself with good effect in cases of pleurisy, peripneumony, hæmoptysis, ileus, colica pictonum, dysentery, and nephritis. In some of these cases several ounces of the oil have been taken at a dose, repeated two or three times in a day. But in ileus, and the species of colic just mentioned, the *oleum ricini* is preferable. *De Haen* Rat. Med. *Degner* de Dyfenteria.

¶ *MALVA Sylvestris*. Monadelphia Polyandria. Columniferæ. Indigenous. (Folia.) Common Mallow. The dried leaves are an ingredient in the *Decoctum pro Enemate*, Ph. Lond. formerly termed *Decoctum commune pro clystere*. In some of the foreign Pharmacopœias it enters into the decoctions for fomentations. For all medicinal purposes it is inferior to the Marshmallow; and ought, therefore, to have been expunged from the new materia medica lists of both Pharmacopœias.

MARANTA Arundinacea. Monandria Monogynia. Scitamineæ. South America, and, by transplantation, West-Indies. Indian Arrow-root. The starch prepared from the root of this plant, and
fold

fold under the name of Arrow-root powder, yields with boiling water a good mucilage, which is a common remedy in the West-Indies in diarrhœas and dysenteries. It may be occasionally flavoured with sugar, wine and spices. A tea-spoon full of the arrow-root powder will render half a pint of boiling water sufficiently mucilaginous; those who wish to make a jelly of it, may add a double quantity of the powder. See *Dr. Jas. Clark's Account* of the comparative quantities of amylaceous matter yielded by different vegetables growing in the West-India islands; in *Dr. Simmons' Med. Facts and Observations*, Vol. VII.

MIMOSA Nilotica. Polygamia Monœcia. Lomentaceæ. Arbor, Arabia, Egypt, and Senegal. Succus gummosus ex cortice trunci promanans sole aëreque exsiccatus, *Gummi Arabicum* dictus. Gum Arabic. This gum affords a pure and excellent mucilage.

It is applicable to various medicinal and pharmaceutical purposes. When dissolved in a proper quantity of water and duly sweetened with syrup, it forms a useful demulcent in hoarsenesses, tickling coughs and phthisis pulmonalis; as well as in diarrhœas, dysenteries, strangury, stone and gravel, and ardor urinæ. In these cases opiates are advantageously

vantageously joined with it. In pharmaceutical operations, it is employed to render oils, balsams, and resins, miscible with aqueous liquors. It is an ingredient in the *Pulvis Tragacanthæ compositus*, Ph. Lond. which we have already noticed; and in the *Trochisci Arabici* and *Trochisci Glycyrrhizæ*, Ph. Ed. The latter have been already described under the article Glycyrrhiza; the former, viz. the *Trochisci Arabici* (formerly termed *Trochisci Bechici Albi*) consist of gum arabic four ounces, starch one ounce, double-refined sugar one pound; all which being well rubbed together, are, with the help of a sufficient quantity of rose water, made into troches; to be given in the same cases as the *Trochisci Glycyrrhizæ* before-mentioned. The *Mucilago Arabici Gummi*, Ph. Lond. is made by dissolving four ounces of the gum in eight ounces of water; while the *Mucilago Gummi Arabici*, Ph. Ed. is prepared with equal quantities, by weight, of the gum and water, and is afterwards passed through a linen strainer. These mucilages are, like that of the gum tragacanth, chiefly used for pharmaceutical purposes; but they may be given alone or combined with syrups and other additions, in the dose of half an ounce or six drams. The *Emulsio Arabica*, Ph. Ed. is the *Emulsio Communis* of that Pharmacopœia with the addition of two ounces of the mucilage of gum arabic to two pounds and a half of the afore-

saïd emulsion. It is given in the same cases and in the same doses as the simple emulsion.

OLEA Europæa. Olive-oil. Salad-oil. (See Vol. I. p. 174.) This is given alone and variously combined, in the same cases and in the same doses as the Almond-oil. Being cheaper than the latter, it is more frequently employed in the preparation of emollient clysters, ointments and cerates.

ORCHIS mascula. Gynandria. Diandria. Orchideæ. Indigenous. (*Radix Salep dicta.*) Salep. The dried pulverized root, of this and several other species of orchis, gives out a pleasant mucilage to boiling water. The proportions should be half an ounce of the former to a quart of the latter. This has been administered with good effect in diarrhœa, dysentery, strangury, stone and gravel, hectic fever, and phthisis pulmonalis. (Vol. I. p. 56.) A jelly is also prepared from salep, by steeping one drachm thereof in four ounces of hot water, and afterwards squeezing it through a cloth strainer. This may be sweetened and aromatized at pleasure. *Percival's Essays* and *Lind on Diseases incidental to Europeans in Hot Climates.*

¶ *PYRUS Cydonia.* Icosandria. Pentagynia.
Pomaceæ

Pomaceæ. Arbor. Cultivated in Northern Europe, but a native of Crete. (Semen. Cydoniorum Semina.) Quince-feed. From the seeds of this fruit, hot water extracts a mucilage; which being in no respect different from the other mucilages already described, may well be dispensed with. There is in the new Pharmacopœia of the London College a *Mucilago Cydonii*. One drachm of the seeds is directed to be boiled gently in eight ounces of water for ten minutes, and then strained. The mucilages of gum arabic and gum tragacanth render this quite superfluous.

TRITICUM *hybernum*. Triandria. Digynia. Gramina. Supposed to have been introduced from Sicily. (Tritici Semen, Amylum ex eodem præparatum) Wheat and *starch* prepared therefrom. Dissolved in hot water, starch yields a strong mucilage, which is advantageously administered by the mouth and per anum in diarrhœas and dysenteries. As a mucilage it is likewise serviceable in phthifical and hectic cases. Hence it is an ingredient in the *Trochisci Amyli*, Ph. Lond. and in the *Trochisci Arabici*, Ph. Ed. The latter have been already described; the former consist of starch one ounce and a half, Liquorice-root six drachms, Iris-root half an ounce, double-refined sugar a pound and a half. All these ingredients being rubbed together into a powder are to be made

into troches by means of mucilage of tragacanth. The iris, as the College suggests, may be omitted. The *Mucilago Amyli*, Ph. Lond. is made by triturating three drachms of starch with a pint of water, and afterwards boiling for a short time. The *Mucilago Amyli*, Ph. Ed. is prepared (in the same manner) with half an ounce of starch to a pound of water. This mucilage is used clysterwise in diarrhœas and dysenteries. To such clysters laudanum is often advantageously added.

TUSSILAGO Farfara. Syngenefia. Polygamia. Superflua. Compositæ Discoideæ. Indigenous. (Folia et Flores) Coltsfoot. A decoction of this herb has, on account of its mucilaginous properties, been recommended in catarrhal and phthifical cases. (*Thesaur. Med.* p. 154); also in scrophulous ulcerations. *Fuller Med. Gymnastica.*

CERA. Wax. This substance is collected from certain parts (chiefly from the pollen of the antheræ) of vegetables, by bees. As it is not, like honey, taken into their bodies, there to be concocted and in some degree animalized and afterwards ejected, it may properly enough be ranked among the vegetable products.

It is given internally in cases of obstinate diarrhoea and dysentery, combined, by means of soap, with aqueous and mucilaginous liquors, so as to form a sort of emulsion. *Thesaur. Med.* p. 152.

TABULAR VIEW
OF
THE CONTENTS OF CLASS III.

ABSORBENTS.

(1) <i>From the Animal Kingdom.</i>	<i>Aqua Kali puri. Water of Ammonia præparata. Prepared Ammonia.</i>	<i>Pure Kali. Soap-ley.</i>
	<i>Volatile Salt of Ammoniac.</i>	(3) <i>From the Mineral Kingdom.</i>
<i>Aqua et Spiritus Ammoniaë.</i>	¶ <i>Bolus Gallicus. French Bole.</i>	
<i>Water and Spirit of Ammonia.</i>	<i>Bolus Armenus. Armenian Bole.</i>	
<i>Spirit of Salt Ammoniac.</i>	<i>Terra Lemnia. Lemnian Earth.</i>	
<i>Liquor Volatilis Cornu Cervi.</i>	<i>Calx viva. Quick-lime.</i>	
<i>Volatile Liquor of Hartshorn.</i>	<i>Creta præparata. Prepared Chalk.</i>	
<i>Spirit of Hartshorn.</i>		
<i>Cornu Cervi Usūm. Burnt Hartshorn.</i>	<i>Pulvis Cretæ compositus. Compound Powder of Chalk.</i>	
<i>Cancer Pagurus. The Crab.</i>	<i>Pulvis Cretæ compositus cum Opio. Compound Powder of Chalk with Opium.</i>	
¶ <i>Ifis nobilis. Red Coral.</i>		
<i>Ostrea edulis. The Oyster.</i>	<i>Trochisci Cretæ. Chalk Troches.</i>	
<i>Spongia officinalis. Sponge.</i>		
(2) <i>From the Vegetable Kingdom.</i>	<i>Mistūra Cretacea. Chalk Mixture.</i>	
<i>Kali præparatum. Prepared Kali. Fixed Vegetable Alkali. Salt of Tartar.</i>	<i>Magnesia. Magnesia.</i>	
	<i>Natron præparatum. Prepared Natron.</i>	
<i>Lixiva purificata. Purified Lixiva. Fixed Vegetable Alkali. Salt of Tartar.</i>	<i>Soda purificata. Purified Soda. Fixed Mineral Alkali.</i>	
<i>Aqua Kali præparati. Water of Prepared Kali. Ley of Tartar.</i>		

CLASS

CLASS III.

ABSORBENTS.

THE substances which belong to this class, are especially adapted to such disorders of the stomach and intestinal canal, as proceed from, or are connected with, acidity in those parts. Hence they are frequently prescribed in the diarrhoeas of children and old people. It should be remarked, however, that much abuse prevails in regard to their exhibition in the diseases of children; where complaints are often aggravated rather than relieved by them. There is even reason to suspect, that they sometimes lay the foundation for mesenteric obstructions and other visceral mischief. In like manner they not unfrequently prove hurtful in the dysenteric affections of adults, in consequence of being given at too early a period of such attacks; thereby causing to be pent up and retained what ought to come away. Hence, in the administration of medicines of this class, more judgment and circumspection are required, than is generally imagined. The common error is, to begin with them too soon, and to continue them too long.

(1) *From the Animal Kingdom.*

AMMONIA *præparata*, Ph. Lond. et Ed. (See Vol. I. p. 172.) Volatile Alkali. From five to twelve grains of this alkaline salt, joined with ten or fifteen grains of pulverized ginger, are sometimes given, in aqueous vehicles, in gouty acidities of the stomach. In similar cases, and in some convulsive disorders of children connected with acidity of the *primæ viæ*, are prescribed the *Aqua et Spiritus Ammoniacæ*, Ph. Lond. et Ed. (p. 173 and 242, Vol. I.) The former is given to adults in doses of thirty to fifty drops; to children, in doses of three to six drops: of the latter (*viz.* the *spiritus ammoniacæ*) half the before-mentioned quantities will generally suffice. In similar cases and doses may be exhibited the *Liquor Volatilis Cornu Cervi*, Ph. Lond. and *Aqua Ammoniacæ ex Ossibus*, Ph. Ed.—From the *Cornu Cervi Ustum* (Burnt Hartshorn) is prepared the *Decoctum Cornu Cervi*, Ph. Lond. (formerly called *Decoctum Album*.) Two ounces of burnt hartshorn and six drachms of gum arabic, are boiled in three pints of water down to a quart, the decoction being constantly stirred. Of the strained liquor a tea-cup full may be taken at pleasure in diarrhœas attended with acidity and acrimony of the intestinal canal. The *Cornu Cervi Ustum* is an ingredient

dient in the *Pulvis Opiatus*, Ph. Lond. which consists of one part purified opium, and nine parts burnt hartshorn. Dose from five to ten grains. It is given, like the *Decoctum Cornu Cervi*, in diarrhœas.

CANCER *Pagurus*. Insecta Aptera. In the Europæan seas. (Chelæ Cancrorum) 'Crabs' Claws. The Claws are prepared for medicinal use by pulverization, levigation, ablution with hot water, and subsequent exsiccation upon chalk, blotting paper being interposed between the levigated claws and the chalk. Dose half a drachm or more, in the same cases as the *Creta Præparata*, which see. They are the principal ingredient in the *Pulvis Chelarum Cancri compositus*, Ph. Lond. which consists of Crabs' claws one pound, chalk and red coral, each three ounces. Dose half a drachm or two scruples. The Coral is a superfluous ingredient in this composition. It should be thrown out, and a double quantity of chalk substituted in its place.

¶ Isis nobilis. Vermes. Zoophyta. Mediterranean. (Corallium Rubrum.) The Red Coral. Crabs' claws render this an unnecessary addition to the list of the materia medica. It is not to be found in the Edinburgh catalogue; and it will doubtless

doubtless be expelled from the London Pharmacopœia, on the next revision of that work.

OSTREA edulis. Vermes. Testacea. In the Europæan Seas. (*Ostreum*. Testa.) The Oyster. Its shell is prepared in the same manner, and given in the same doses, as the *chelæ cancri*. The one may be indifferently used for the other, and perhaps there is no occasion for both. The calcined shells have been recommended by some physicians for the preparation of lime-water; but for this purpose they deserve no preference over common quick-lime.

SPONGIA officinalis. Vermes. Zoophyta. Mediterranean. Burnt sponge (*spongia usta*) seems to owe its beneficial operation (mostly slight and uncertain) in scrophulous disorders, partly to its alkaline and partly to its carbonaceous nature. Perhaps the first-mentioned property may contribute to the solution and diffusion (in the human body) of its coaly matter. It is given (made into a bolus or lozenge) in doses of a scruple or half a drachm, twice a day. *Thesaur. Med.* p. 351. What would be the effect of larger doses joined with a small quantity of opium, to prevent purging? *Hufeland* makes a lixivium of it, and joins bitters and narcotics with it.

(2) From

(2) *From the Vegetable Kingdom.*

KALI *præparatum*, Ph. Lond. Lixiva purificata, Ph. Ed. (Alkali Vegetabile Fixum.) Prepared Kali. Purified Lixiva. Fixed Vegetable Alkali. Salt of Tartar. (See Vol. I. p. 235.) Dissolved in water, this alkaline salt has been administered with good effect in acidities of the stomach and intestinal canal, and in convulsive affections therewith connected. In the last-mentioned cases it is joined with opium, and applied also externally in the form of a bath. (*Stutz* in *Hufeland's Journal*, and in the *Medical and Physical Journal*, Vol. V.) In the same manner this alkali has been given with success to rickety children. (*Thesaur. Med.* p. 159.) In larger doses it is often successfully employed when acid and mineral poisons have been swallowed. The aerated solution of it, well known under the name of *Aqua Mephitica Alkalina* (*Ibid.* p. 103—105) is an efficacious remedy in calculous complaints. This, however, belongs rather to the class of Diuretics. In the disorders above-mentioned the *Kali præparatum* may be given to children in doses of from one to five grains, dissolved in mucilaginous and saccharine liquors; to adults in doses of five to fifteen grains. When combined with fixed air or carbonic acid, as in the above-mentioned aqua mephitica alkalina, a larger quantity

tity of the kali (for instance a scruple) may be given at a time. For the same purposes as the salt itself, may be used the *Aqua Kali Præparati*, Ph. Lond. (Lixivium Tartari) which is nothing more than the kali brought into a state of deliquescence, or liquidness, by exposure in a damp place; but as the strength of this is apt to vary, it is perhaps better to use definite quantities of the prepared kali and water in its place. Dose, to adults, fifteen or twenty drops in any appropriate vehicle.

AQUA Kali Puri, Ph. Lond. *Aqua Lixivia Caustica*, Ph. Ed. (Lixivium Saponarium. Lixivium Causticum. Soap-ley.) This is obtained by de-aërating (or rendering caustic) prepared kali (or purified lixiva) by means of quick-lime and water, and afterwards filtrating the liquor. In the Lond. Formula there are six parts of quick-lime to four of the alkali; in the Ed. eight of the former to six of the latter. In the Lond. Formula a gallon of water is directed to every pound of the alkali. The whole quantity of water employed in the Ed. Formula gives nearly the same proportion; but it is not added to the quick-lime and alkali all at once, part of it being poured upon the filter to wash away from the lime all the remaining pure alkali. This lixivium, when duly prepared, excites no effervescence on being mixed with acids.

The

The Aqua Kali Puri was formerly much employed in calculous disorders. From ten to forty drops were given in gruel, milk, or broth, twice or thrice a day; but even in these doses it has often proved highly injurious, when long continued, to the organs of digestion. Hence it has been justly superseded by the aërated solution of kali, or aqua mephitica alkalina, before-mentioned. *Home on Solvents* 1783.

(3) *From the Mineral Kingdom.*

¶ *BOLUS Gallicus.* French Bole coincides in its properties with the *Creta Præparata*, which see. Perhaps this article of the materia medica might be dispensed with; for it is doubtful whether the argillaceous earth, which enters into its composition, possesses any peculiar agency, distinct from that of the cretaceous absorbents. The *Terra Lemnia*, a species of bolar earth, and *Bolus Armena* are equally obsolete with the above. In consequence of the ferruginous calx with which some of these earths abound, they have been supposed to exert an astringent operation, and hence have been employed in chronic diarrhœas, and dysenteries. See Astringents. *Gmelin Apparatus Medicaminum*, Vol. I.

CALX *viva*. Lapis Calcareus recens ustus. Quick-lime. Fresh burnt Lime-stone. This is employed for the preparation of the *Aqua Calcis*, Ph. Lond. et Ed. This is made (according to the directions of the Lond. College) by adding twelve pints of hot water to half a pound of quick-lime, and then stirring them about; after standing together in a covered vessel for an hour, the liquor is poured off [from the sediment] and kept in a vessel [closely] stopped. The Edinburgh College direct the same quantity of lime to be slaked with four ounces of water, to which, while yet warm, twelve pounds of water are afterwards added, the whole being stirred together. When the lime has settled to the bottom it is to be stirred up again with the water, and this is to be repeated about ten times, taking care that the vessel be constantly closed, so as to keep away the external air. Lastly, the water is to be filtered through blotting paper in a funnel provided with a lid, and to be kept in bottles well stopped. This process is unnecessarily tedious. It is justly remarked in *Healde's* Translation of the London Pharmacopœia, that by avoiding the frequency of stirring, and the filtration, the aqua calcis of the London College is much less exposed to the air. This objection might be done away, if, after the example of the Swedish Pharmacopœia, the Edinburgh College were to direct the vessel itself containing the

the lime-water to be shaken, instead of having the lime stirred up with the water. In the former case there would be no necessity for uncovering the vessel until the liquor should be fit to be poured off; and that should be done, after the manner of the London Pharmacopœia, by simple decanting without straining.—This is a solution of *pure* or *de-aërated* calcareous earth in water. It is given in doses of a quarter of a pint, or even half a pint, in acidities of the stomach and intestinal canal; in diarrhœa and dysentery; in diabetes; in fluor albus, and in calculous affections; in which last, however, it has been superseded by the aqua mephitica alkalina. It is also prescribed in scrophulous, phthifical and cancerous cases. It is sometimes mixed with an equal quantity of warm milk; at other times it is given in combination with bitters, astringents and light aromatics. *Cartheuser* de Aquæ Calcis vivæ usu interno, 1743. *Girtanner* de Terra Calcareæ cruda et calcinata, 1782. *Vogel* de Curatione Cancri per Aquam Calcis vivæ, 1769. *Whytt* on the Virtues of Lime-Water, 1752. *Alston's* Dissertations on Quick-lime and Lime-Water 1754.

CRETA præparata. This is chalk levigated, washed, and afterwards dried in the same manner as the chelæ cancrorum. From fifteen grains to a drachm

drachm are given for a dose in the same cases as crabs' claws and the other earthy absorbents. The *Pulvis Cretæ compositus*, Ph. Lond. is composed of chalk six parts, cinnamon four parts, tormentil, and gum arabic, each, three parts, pepper, 1-32d part of the whole. Dose from fifteen grains to half a drachm, in diarrhœas, (especially those which occur in the advanced stage of low fevers) and other disorders of the intestinal canal. In prescribing this and the other preparations of chalk in dysenteries, the precautions mentioned at the head of this class of medicines should not be neglected. The *Pulvis Cretaceus*, Ph. Ed. consists of chalk four ounces, nutmeg half a drachm, cinnamon a drachm and a half. It is given in the same cases, and in the same doses, as the preceding. The *Pulvis Cretæ compositus cum Opio*, Ph. Lond. is made by adding a drachm and a half of opium to eight ounces of the compound powder of chalk. From fifteen grains to two scruples may be given for a dose. Two scruples contain nearly a grain of opium. It is applicable to the same cases as the preceding preparations.

The *Trochisci Cretæ*, Ph. Lond. (formerly called *Tabellæ Cardialgicæ*) consist of chalk four ounces, crabs' claws two ounces, fine sugar three ounces, cinnamon 1-18th part, formed into troches by
means

means of mucilage of gum arabic. One of these is dissolved in the mouth now and then in cases of heart-burn, gouty flatulence, &c.

The *Trochisci Cretæ*, Ph. Ed. consist of chalk four ounces, gum arabic one ounce, nutmeg one drachm, fine sugar six ounces, formed into troches, with a sufficient quantity of water.

The *Mistura cretacea*, Ph. Lond. (formerly called *Julepum e Creta*) is compounded of chalk one ounce, double refined sugar six drachms, gum arabic one ounce, water two pints. Dose one or two ounces, in acidities of the stomach and bowels, and in the colliquative diarrhœas, which occur in hectic and phthifical cases. Small quantities of tincture of opium are often usefully joined with it.

The *Potio Cretacea*, Ph. Ed. is made by gradually mixing (by the aid of trituration) one ounce of chalk, half an ounce of fine sugar, and two ounces of mucilage of gum arabic, with two pounds and a half of water, and two ounces of spirit of cinnamon. Dose four spoonsfull occasionally. In the same cases as the *Mistura cretacea*.

MAGNESIA *usta*. M. *alba*, Ph. Lond. et Ed. should
Vol. II. D have

have been denominated *Magnesia pura*. *M. præparata*. (See Vol. I. p. 216.) This earthy substance is frequently prescribed for the removal of complaints connected with acidity of the stomach and bowels, to which children are especially liable. To these it is given in doses of ten or fifteen grains in any appropriate vehicle, joined sometimes with rhubarb, sometimes with opium. To adults it is given in doses of half a drachm or a drachm. In larger quantities it proves purgative. See Cathartics.

The *Trochisci Magnesiae*, Ph. Lond. are composed of calcined magnesia four ounces, refined sugar two ounces, ginger one scruple, made into a paste with mucilage of gum arabic. They are given in the same manner, and in the same cases, as the chalk-troches.

NATRON præparatum, Ph. Lond. *Soda purificata*, Ph. Ed. Prepared Natron. Purified Soda (Alkali Minerale. Sal Alkalinus Fixus Fossilis.) Solutions of this alkaline salt in common water afterwards super-saturated with the carbonic acid or fixed air, (the proportions of water and salt being the same as those of the vegetable fixed alkali in the common aqua mephitica alkalina) are prescribed with great success, under the name of *acidulous soda-water*, in calculous complaints. In situations,

situations, where these solutions cannot be prepared or cannot be purchased, the natron may be used in the form of pills in the manner described at p. 240 Vol. I.

TABULAR VIEW
OF
THE CONTENTS OF CLASS IV.

REFRIGERANTS.

(1) <i>From the Vegetable Kingdom.</i>	<i>Acidum muriaticum. Muriatic Acid.</i>
<i>Acetum distillatum. Distilled Vinegar.</i>	<i>Acidum vitriolicum. Vitriolic Acid.</i>
<i>Kali acetatum. Acetated Kali. Diuretic Salt.</i>	<i>Spiritus Ætheris vitriolici. Spirit of vitriolic Æther.</i>
<i>Aqua Ammonia acetata. Water of Acetated Ammonia.</i>	<i>Plumbum acetatum. Acetated Lead.</i>
<i>Mindererus's Spirit.</i>	<i>Cerussa acetata. Acetated Cerusse.</i>
<i>Citrus medica. The Lemon.</i>	
<i>Kali nitratum. Nitrated Kali. Purified Nitre.</i>	<i>Aqua lithargyri acetati. Water of Acetated Litharge.</i>
<i>Oxalis Acetofella. Woodsorrel.</i>	<i>Extract of lead.</i>
<i>Tartarum purificatum. Purified Tartar. Crystals of tartar.</i>	<i>Aqua lithargyri acetati composita. Compound Water of acetated Litharge. Goulard Water.</i>
(2) <i>From the Mineral Kingdom.</i>	<i>Zincum vitriolatum. Vitriolated Zinc. White Vitriol.</i>
<i>Aqua frigida. Cold Water.</i>	

CLASS.

CLASS IV.

REFRIGERANTS.

(1) *From the Vegetable Kingdom.*

ACETUM *distillatum*, Ph. Lond. et Ed. Distilled Vinegar. This, in common with other acids, moderates the excessive heat in febrile disorders, when duly diluted with water. An ounce added to a quart of spring water, with or without sugar, forms, in these cases, a pleasant beverage (the *oxycraton* and *posca* of the ancients) which may be drank in large quantities, according to the desires of the patient. See *Mel acetatum* and *Syrupus Aceti*.

The *Kali acetatum*, Ph. Lond. *Lixiva acetata*, Ph. Ed. (See Vol. I. p. 236) is employed for the same purposes, dissolved in water, in the proportion of two drachms to a pint. A tea-cup full may be taken at pleasure.—The *Aqua Ammoniacæ acetatæ*, Ph. Lond. et Ed. (See Vol. I. p. 242) which is prepared by saturating ammonia with vinegar, may be given in the same cases in doses of three drachms or half an ounce, diluted with an ounce and a half of water. In the preparation of what are termed *Saline draughts*, a scruple or

half a drachm of prepared kali, is saturated with half an ounce or six drachms of vinegar, and afterwards diluted with water and sweetened with a proper quantity of syrup. For this purpose, however, lemon-juice is preferable, where it can be procured. Vinegar may also be administered clysterwise mixed with an equal proportion of water. *Thesaur. Med.* p. 167.

CITRUS *medica*. Polyadelphia. Icosandria. Pomaceæ. Arbor. Asia; and by transplantation in the Southern parts of Europe. (Limon.) The Lemon. The juice of this fruit is among the most grateful of the vegetable acids. Like vinegar it may be given freely to quench thirst and diminish heat in fevers, diluted in the same manner with water, and rendered palatable with the addition of sugar. This is what is termed *Lemonade*. The juice is also employed in the same manner as the acetous acid or distilled vinegar, for the preparation of the *effervescing* or *Saline-draughts* before-mentioned, and of which examples may be seen in the *Thesaur. Med.* p. 162, 163.

KALI *nitratum*, Ph. Lond. Lixiva *nitrata*, Ph. Ed. (Nitrum) Nitre. Saltpetre. (See Vol. I. p. 237.) This neutral salt is frequently prescribed, with good effect, for abating heat and thirst in febrile diseases. Fifteen grains or a scruple may
be

be given for a dose, in the form of a powder triturated with sugar, or dissolved in a sufficient quantity of water, and sweetened with syrup, so as to form a julep. It is in inflammatory disorders that this salt has been found useful, such as acute rheumatism, (*Brockelsby's Observations on Army Diseases*) mania, pulmonary hæmorrhage, &c. Of late, indeed, some attempts have been made with it in typhus-fever, but a medicine which lowers the pulse is little suited to such cases.

In hæmoptoe and other hæmorrhages, it may be given either in the form of a bolus combined with rose-conserve, or dissolved in infusion of roses (unacidulated) in the form of a mixture or draught. (*Dickson Med. Observations and Inquiries*, Vol. IV. and *Gibbon's Medical Cases*.)

The *Trochisci nitri*, Ph. Lond. et Ed. consist of this salt made into the required form with mucilage of gum tragacanth. They are given in inflammatory affections of the lungs.

The *Spiritus Ætheris nitrosi*, Ph. Lond. et Ed. (See Vol. I. p. 238) may, in like manner, be employed as a refrigerant in febrile and inflammatory disorders, in doses of forty or sixty drops, diluted with water. *Hoffmann de Nitro, ejus Natura et Usu in Medicina*, 1698. *Cartheuser de Amplissimo Nitri Ufu Medico*, 1747.

OXALIS *Acetosella*. Woodforrel. See Antiseptics.

TARTARUM *purificatum*. Crystalli Tartari. (Cremor Tartari) See Vol. I. p. 213. Two drachms of this salt dissolved in a quart of hot water with a proper quantity of sugar, and afterwards suffered to get cold, forms a pleasant cooling beverage (called Imperial) in fevers.—The *concrete acid of tartar* or *essential Salt of tartar*, obtained from crystals of tartar in the manner described in the Appendix to the *Thesaur. Med.* p. 370, may be employed, when dissolved in water, in place of vinegar or lemon-juice.

(2) *From the Mineral Kingdom.*

AQUA *frigida*. Water, considered in relation to its chemical composition and decomposition, belongs strictly to none of the three kingdoms of nature; but as all water, except that which is distilled, contains more or less of mineral substances dissolved in it, and as spring water is the water here intended, it may properly enough be ranged under the present head.

From the remotest times to the present day Cold Water has been resorted to as the simplest,
and

and most efficacious refrigerant in inflammatory and febrile disorders. In the ardent and malignant fevers of hot climates, physicians allow their patients to drink it in unlimited quantities; and the Italian practitioners trust almost entirely to it in such cases. It is scarcely necessary to remark that this treatment cannot be carried to so great a length in the fevers of this country. Cold Water is also of eminent service in pulmonary and uterine hæmorrhages. *Lanzani* Manner of using Cold Water (in Italian) 1717. *Hancocke* and *Cyrillus*, as quoted hereafter.

At the same time that cold water is administered internally in the fevers above-mentioned, it is likewise applied externally, *under certain restrictions*, with great advantage. It has been employed in this manner in the Yellow Fever of the West-Indies and America; and the reports of many British practitioners concerning the result of this practice, during the late war, are much in its favour. Nor has this application been confined to the countries just mentioned; for Dr. Currie, of Liverpool, has reaped equal benefit from ablution with cold water in the common contagious fevers of this climate. Its salutary effects in these cases depend upon its being applied early during the first week, and only when the temperature of the skin is equal to, or above the natural temperature,

ture, *i. e.* during the hot fit. The water is thrown upon the patient's naked body from a bucket, and this is repeated at noon and in the evening. It is seldom necessary to continue it beyond two days.

This treatment, it is evident, is better suited to the army and navy, and to public hospitals, than to private practice. It is also better suited to the warmer regions than to this climate, where pulmonary affection is so frequently complicated with the fevers above-mentioned; a complication which would be aggravated by such treatment.—Spunging the patient's body briskly with *tepid* water (the evaporation of which produces a refrigerating effect) is a method of abstracting febrile heat, which, in this country, is more likely to be generally adopted.—Cold water is an useful application in phlegmonous inflammations; and in cases of burns and scalds, when applied immediately after the accident, it has been found to abate the pain and prevent inflammation more effectually than any other remedy. See *Earle* on Burns, 1800. *Hancocke* Febrifugum Magnum; or Common Water the best Cure for Fevers, 1722. *Hoffmann* de Aquæ frigidæ salubritate, 1729. *Cyrillus* on the Use of Cold Water in Fevers, in *Phil. Trans.* Vol. XXXVI. *Floyer* Psychrolusia, 1702. *Currie's* Reports on the Effects of Water, 1798, and in *Medical and Physical Journal*, Vol. VI.

ACIDUM

ACIDUM muriaticum, Ph. Lond. et Ed. (Spiritus Salis marini.) Muriatic Acid. Marine Acid. Spirit of Salt. Obtained by mixing together (cautiously) sea-salt and vitriolic acid diluted with an equal quantity of water, (or, according to the Lond. Pharmacopœia, with only five parts of water to six of the acid) and afterwards distilling. The vitriolic acid unites with the alkaline basis of the sea-salt, expelling the muriatic acid, which, being volatilized by the heat, passes over into the receiver. Ten or fifteen drops of this acid, diluted with water and rendered palatable with sugar, may be given for a dose in fevers; but in these cases the vitriolic acid is generally preferred. See Antiseptics.

ACIDUM vitriolicum dilutum, Ph. Lond. consists of one part vitriolic acid to eight of water. The *Acidum vitriolicum dilutum*, Ph. Ed. consists of one part vitriolic acid to seven of water. Dose twenty to forty drops, duly diluted with water, and sweetened with syrup. For farther remarks on this acid, see Antiseptics.—The *Spiritus Ætheris vitriolici*, Ph. Lond. (Spiritus Vitrioli dulcis) is obtained by distilling together in a gentle heat equal parts of rectified spirit of wine and vitriolic acid. The *Spiritus Ætheris vitriolici*, Ph. Ed. is prepared by simply mixing together

3 one

one part vitriolic æther with two parts rectified spirit of wine. This is often successfully employed to moderate heat and promote perspiration in febrile disorders. Dose from forty to eighty or a hundred drops.—For observations on the *Spiritus Ætheris vitriolici compositus*, see Antispasmodics.

PLUMBUM *acetatum*. Acetated Lead. Solutions of some of the calces of this metal in the acetous acid, when duly diluted with water, are frequently applied externally to remove inflammation. Thus by boiling the semi-vitreous calx of this metal, termed lithargyrus, in vinegar, is obtained the *Aqua lithargyri acetati*, Ph. Lond. (formerly called *Extractum Saturni*.) A drachm or two mixed with about a pint of water, forms an embrocation in general use. In the *Aqua lithargyri acetati composita*, Ph. Lond. (which is similar to the famous Goulard-Water) there are a drachm of the water of acetated litharge, and a drachm of proof spirit of wine to a pint of distilled water. From late observations, however, it would appear, that Cold Water alone answers, in most cases, as well as these compound metallic solutions.—In like manner solutions of the *Cerussa acetata* (formerly termed *Saccharum Saturni*, Sugar of Lead.—A Salt formed by the union of the calx of lead with the acetous acid) may be employed

ployed as embrocations, in bruises and external inflammations. (See Astringents.) This Saline preparation may also be combined with fatty substances, so as to form an ointment, of which there is a specimen in both our Pharmacopœias, under the title of *Unguentum Cerussæ acetatæ*; for cautions respecting the use of which ointment, and other preparations of lead, see *Thesaur. Med.* p. 170.

The titles, *Aqua lithargyri acetati*, and *Aqua lithargyri acetati composita*, are exceptionable. The first for the reason assigned in the instance of the *aqua ammoniæ acetatæ*, at p. 134, of the *Thesaur. Med.* and the last, because the epithet COMPOUND generally implies an increase of strength; whereas, in the present case, the *aqua lithargyri acetati COMPOSITA* is a much weaker preparation than the simple *aqua lithargyri acetati*. Such modes of denomination may lead to serious errors. Would it not be better to call the first *acetum lithargyri* or *acetum lithargyratum*; and the last, *acetum lithargyri dilutum* or *acetum lithargyratum dilutum*? Perhaps after all, a solution of the cerussa acetata in vinegar would, on every occasion, be preferable to these preparations.

ZINCUM *vitriolatum*. Vitriolated Zinc. (*Vitriolum album*. White Vitriol.) A salt formed
by

by the union of calx of Zinc with the vitriolic acid. Solutions of this are frequently employed as embrocations, injections and collyria. (*Thesaur. Med.* p. 167.) See Astringents.

TABULAR

TABULAR VIEW
OF
THE CONTENTS OF CLASS V.

ANTISEPTICS.

(1) <i>From the Animal Kingdom.</i>	† <i>Artemisia maritima.</i> Sea Wormwood.
<i>Ammonia acetata.</i> Acetated Ammonia. Water of Acetated Ammonia.	<i>Cinchona officinalis.</i> Peruvian Bark.
<i>Ammonia muriata.</i> Muriated Ammonia. Salt ammoniac.	<i>Citrus medica.</i> The Lemon.
(2) <i>From the Vegetable Kingdom.</i>	<i>Conium maculatum.</i> Hemlock.
<i>Acetum distillatum.</i> Distilled Vinegar.	<i>Daucus Carota.</i> The Carrot.
<i>Acetum aromaticum.</i> Aromatic vinegar.	<i>Dorstenia Contrayerva.</i> Contrayerva.
<i>Acetum camphoratum.</i> Camphorated vinegar.	<i>Hordeum vulgare.</i> Barley. Malt.
<i>Acetum nitrosum.</i> Nitrous vinegar.	<i>Laurus Camphora.</i> Camphor.
<i>Anthemis nobilis.</i> Chamomile.	<i>Humulus Lupulus.</i> The Hop.
<i>Aristolochia Serpentaria.</i> Virginia Snake-root.	<i>Myrrha.</i> Myrrh.
<i>Arnica montana.</i> Leopard's bang.	<i>Oxalis Acetosella.</i> Woodsorrel.
<i>Artemisia Abrotanum.</i> Southernwood.	<i>Papaver somniferum.</i> The White Poppy. Opium.
<i>Artemisia Absinthium.</i> Common Wormwood.	<i>Pinus Larix.</i> The Larch-tree. Turpentine.
	<i>Prunus spinosa.</i> The Sloe.
	<i>Ribes nigrum.</i> The Black Currant.
	<i>Ruta graveolens.</i> Rue.
	<i>Carbo lignarius.</i> Charcoal.
	<i>Gas acidum carbonicum.</i> Carbonic acid gas. Fixed air.
	<i>Fermentum</i>

Fermentum cerevisiæ. <i>Yeast.</i>	Spiritus Ætheris vitriolici.
Cerevisia. <i>Malt liquor.</i>	<i>Spirit of vitriolic æther.</i>
Vinum. <i>Wine.</i>	Argilla vitriolata. <i>Vitriolated</i>
Spiritus vini. <i>Spirit of Wine.</i>	<i>argill. Alum.</i>
(3) <i>From the Mineral King-</i>	Argentum nitratum. <i>Nitrated</i>
<i>dom.</i>	<i>Silver.</i>
Aqua frigida. <i>Cold Water.</i>	Cuprum acetatum. <i>Acetated</i>
Acidum muriaticum. <i>Muriatic</i>	<i>Copper.</i>
<i>Acid.</i>	Cuprum vitriolatum. <i>Vitrio-</i>
Acidum vitriolicum. <i>Vitriolic</i>	<i>lated Copper.</i>
<i>Acid.</i>	¶ Natron boracicatum. <i>Borax.</i>
Acidum vitriolicum aromati-	
cum. <i>Aromatised vitriolic</i>	Acidum nitricum. <i>Nitric Acid,</i>
<i>acid.</i>	

CLASS V.

ANTISEPTICS.

(1) *From the Animal Kingdom.*

AMMONIA *acetata*. (See Refrigerants.) This is frequently and advantageously employed in malignant fevers.

AMMONIA *muriata*, Ph. Lond. et Ed. (Sal Ammoniacus) Muriated Ammonia. Salt Ammoniac. A neutral Salt compounded of the Volatile alkali and muriatic acid. It is given by some practitioners internally in malignant fevers, in doses of ten or thirty grains, dissolved in the camphorated mixture, bitter infusions or decoction of cinchona; but it is more frequently used in gargles and external applications.

(2) *From the Vegetable Kingdom.*

ACETUM. (see Refrigerants) Vinegar. This may be used in the manner described in the preceding class. It is frequently added to gargles. It may also be advantageously combined with

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Aromatics,

Aromatics, as in the instance of the *Acetum Aromaticum*, Ph. Ed. which is made by infusing rosemary, sage, lavender and cloves in vinegar. A tea-spoon full, diluted with water, may be given for a dose.—It is moreover used as an odorament.—In some of the foreign Pharmacopœias there is an *Acetum Camphoratum*, which is made by dissolving Camphor in Spirit of Wine and then adding it to the Vinegar. Dose, the same as that of the aromatic vinegar. It is in like manner used for smelling to. Vinegar boiled with honey to the consistence of a syrup (*oxymel*) is used in gargles and lotions.—By others it has been combined with nitre; and such a mixture or solution (*Acetum nitrosum*) is said to be remarkably efficacious in the scurvy. (*Patterson* on the Scurvy, 1795. *Rollo* on Diabetes, 1798.) It would seem that the vinegar is the principal agent, as nitre alone is not beneficial in this disease. (*Trotter's* Essays.) When vinegar is employed to fumigate sick-rooms it should be boiled in glazed earthen pipkins and carried about the bed, but not thrown upon hot bricks or coals, or heated metallic utensils, by which it is decomposed.

ANTHEMIS nobilis. (Chamœmelum. Herba et Flores.) Chamomile. (See Vol. I. p. 173.) This herb and its flowers are employed in decoctions for antiseptic fomentations and clysters. It is

is an ingredient in the *Decoctum pro Fomento*, Ph. Lond. (formerly termed *Fotus Communis*) which is made by boiling an ounce of dried chamomile, dried wormwood, and dried southernwood, and half an ounce of dried bay-leaves in six pints of water. Two species of *Artemisia* were surely not needful in this decoction. The wormwood (in a double proportion) without the southernwood, or the southernwood without the wormwood would have sufficed. The *Decoctum pro enemate*, Ph. Lond. (formerly called *Decoctum commune pro Clystere*) belongs to Emollients. The *Decoctum Chamæmeli*, Ph. Ed. (called also *Decoctum Commune*) is made by boiling one ounce of chamomile flowers and half an ounce of caraway-seeds in five pints (pounds) of water. This is used clysterwise in quantities of a pint or more, alone or with various additions.—For other remarks on this bitter vegetable and its preparations, see Tonics.

ARISTOLOCHIA Serpentaria. (*Serpentaria Virginiana.*) Virginia Snake-Root. (See Vol. I. p. 245.) Decoctions and infusions of this root, either alone or in combination with the Peruvian bark, are frequently prescribed in the advanced stages of low and malignant fevers. The proportions and doses have been already mentioned in the preceding Volume, under Diaphoretics;

where also notice is taken of the uses and doses of the tincture.

ARNICA *montana*. Leopard's-bane. See Stimulants.

ARTEMISIA *Abrotanum*. Syngenesia. Polygamia æqualis. Compositæ. Discoideæ. Frutex. Southern parts of Europe (*Abrotonum*. *Folia vel summitates*.) Southern Wood. Decoctions of the tops of this bitter-aromatic shrub are frequently used as fomentations in cases of bad ulcers, and gangrenous affections. It is an ingredient in the *Decoctum pro Fomento*, Ph. Lond. as mentioned under the article chamomile.

ARTEMISIA *Absinthium*. Class and Order as the preceding. (*Absinthium*) Common Wormwood. Employed, like the southernwood, in antiseptic fomentations.

¶ ARTEMISIA *maritima*. Class and order as above. (*Absinthium maritimum*.) Sea Wormwood. Used in the same manner as the Common Wormwood; and is an ingredient in the *Decoctum pro Fomento*, Ph. Lond.—There is no use in swelling the catalogue of the materia medica with two species so similar in their sensible qualities and medicinal effects. One of the two, the artemisia

misia absinthium, or this species, should be expunged. For other remarks on this vegetable and its preparations, see Tonics and Anthelmintics.

CINCHONA officinalis. Pentandria. Monogynia. Contortæ. Arbor. Peru. (Cortex Peruvianus.) Jesuit's bark. Peruvian bark. In petchial and other malignant fevers, in the putrid sore throat, and in gangrenous affections, the powder, decoction and tincture of this bark, are given with good effect, joined with acids, portwine, camphor, and opium. It may also be administered clysterwise in these cases, and particularly to children labouring under the confluent small pox accompanied with a typhoid condition of the system. (Thesaur. Med. p. 184.) For an account of the preparations and doses of this valuable article of the materia medica, see Astringents and Tonics, under which classes its other and more general uses will be noticed:

CITRUS medica. (Limon.) The Lemon. (See Refrigerants.) The acid juice of this fruit is given in conjunction with the camphorated-mixture, decoction of cinchona and other antiseptics in malignant fevers, the putrid sore throat and gangrenous affections. (Thesaur. Med. p. 174—
E 3 176.)

176.)—Added to red port-wine and water, it forms a useful beverage (called *Negus*) in all such cases.—The *Succus Limonis Spissatus*, Ph. Lond. duly diluted with water, supplies the place of the fresh juice.—Repeated trials have proved that the acid juice of the lemon is antiscorbutic in a very high degree. In consequence of the testimonies produced in its favour by various physicians and surgeons, it has become a standing remedy in our Navy. The recent juice, alone, or sweetened with sugar (and in some cases mixed with port wine) may be given in the quantity of many ounces in the space of twenty-four hours. If it excites diarrhœa, astringents and aromatics must be joined with it. Where the fresh juice cannot be procured, the crystallized citric acid (prepared by saturating the filtrated juice with chalk, and afterwards adding to the washed precipitate vitriolic acid, according to the processes of *Scheele* and *Dize*.—See *Fourcroy* Systeme des Connaissances Chimiques, Tom. VII.) may be employed in its place. *Lind* on the Scurvy, 1754. *Blane's* Diseases of Seamen, 1789. *Trotter* on the Scurvy, 1792, and his *Medicina Nautica*, 1797 and 1799.

CITRUS Aurantium. Class and order as above.
(*Aurantium hispalense*) The Seville Orange. The
juice

juice of this may be given in scorbutic cases in the same manner as the juice of the lemon. For its Conserve, see Tonics.

CONIUM *maculatum*. Pentandria. Digynia. Umbellatæ. Indigenous. (Herba.) Hemlock. In this place we shall only remark that the inspissated juice, or extract of this plant, is often administered internally in carcinomatous and other malignant ulcers; and that its decoction is employed externally, as a fomentation, in the same cases. Further, the boiled herb is used in the form of a cataplasm. See Narcotics.

DAUCUS *Carota*. (See Vol. I. p. 224.) The Carrot. Poultices made of the scraped root have been applied with good effect to ill-conditioned ulcers. *Thesaur. Med.* p. 180.

DORSTENIA *Contrayerva*. (See Vol. I. p. 249.) Contrayerva. This is given alone or in combination with the bark and acids, in typhus and other malignant fevers; as mentioned in the place above referred to.

HORDEUM *vulgare*. (See Demulcents) Barley. Maltum vel Malta. Malt. The infusion termed *wort* was formerly much used as an antiscorbutic in the navy; but of late years it has given place

to the superior agency of the lemon juice or citric acid. It is a great objection to the use of Wort, that it aggravates the diarrhœa with which scorbutic patients are often harassed. *Macbride's New Method of Treating the Scurvy*, 1767, and his *Experimental Essays*, 1764.

LAURUS *Camphora*. (See Vol. I. p. 251.)
Camphor. This resinous substance, whose preparations and doses have been already mentioned in the preceding Volume as above referred to, has been often successfully employed in petechial and other malignant fevers (*Riverius—Hoffman—Huxham—Pringle*) and in gangrenous affections; in which last it is used externally as well as internally (*Collin Observationes circa Morbos*.) In these cases it is combined with the Peruvian bark, wine and acids. (*Thesaur. Med.* p. 171—174) It has also been administered clysterwise with the best effect to children labouring under the confluent small pox accompanied with a typhoid state of the system. *Buckner de usu Cort. Per cum Camphora remixt. in febribus ex putredine ortis*, 1762.

HUMULUS *Lupulus*. Diœcia. Pentandria. Scabridæ. Indigenous. (*Lupulus. Coni.*) The Hop. Poultices made of the dried blossoms or cones, macerated in water, have lately been applied

plied to ill-conditioned and gangrenous ulcers, with very good effect. *Trotter's Med. Nautica*, Vol. II. *Duncan's Annals of Medicine*, Vol. II.

MYRRHA. (See Vol. I. p. 147.) Myrrh. Solutions of this gum-resin in spirit of wine (see *Tinctura Myrrhæ*, Vol. I. p. 294) are frequently employed in lotions for foul ulcers, and in gargles against the gangrenous fore-throat. In the last-mentioned cases it's more volatile particles may be conveyed to the fauces along with the vapour of hot water or vinegar. *Thesaur. Med.* p. 183.

OXALIS *Acetosella*. Decandria. Pentagynia. Gruinales. Indigenous. (*Lujula*. Folia.) Woodforrel. The juice of this plant abounds in a peculiar acid termed the Oxalic; which, like the citric, is powerfully antiscorbutic.

The *Conserva Lujulæ*, Ph. Lond. (Conserve of Woodforrel) is prepared by bruising the leaves in a marble-mortar, and then beating them together with thrice their weight of double-refined sugar. A tea-spoon full or more may be given occasionally.—The expressed juice may be taken in the same manner as lemon-juice. What is termed the *essential Salt of Woodforrel* (obtained from the expressed juice by filtration, evaporation and crystal-

crystallization) is not pure oxalic acid, but an acidulous salt (like the crystals of tartar) composed of the vegetable alkali supersaturated with the acid of sorrel. Half an ounce of this salt dissolved in fourteen or fifteen ounces of hot water, duly sweetened, forms, when cold, a pleasant and useful beverage in malignant fevers.— The pure oxalic acid which is identical with the acid of sugar, is not used in medicine. *Savary de Sale Essentiale Acetosellæ*, 1773. *Fourcroy Système des Connaissances Chimiques*, Tom. VII.

PAPAYER Somniferum. (See Narcotics.) The White Poppy. Its inspissated juice, called Opium, is given freely, in conjunction with the Peruvian bark and wine, in cases of sphacelation. (*Thesaur. Med.* p. 172.) It is prescribed in more moderate doses in malignant fevers, combined with spices (as in the instance of the *Confectio Opiata*, Ph. Lond.) or dissolved in spirit of wine, (as in the *Tinctura Opii*, Ph. Lond. et Ed.) and added to decoctions of cinchona, contrayerva, and serpentaria, or to camphorated mixtures. But for observations on these and other opiate preparations, the reader is referred to Narcotics.

PINUS Larix. Monœcia. Monadelphia. Coniferæ. Arbor. Mountainous parts of Europe. (Terebinthina Veneta) The Larch-tree. Succus resinofus

resinosus ex arbore fauciata promanans, *terebinthina* dictus. Venice turpentine is the juice which flows from incisions made in the trunk of the aforesaid tree. It is applied externally by the surgeons in foul ulcers and gangrenous affections; as well as its distilled oil (*Ol. Terebinthinæ*, Ph. Lond. et Ed.) commonly called Spirit of Turpentine; which is obtained by distilling the turpentine with somewhat more than an equal quantity of water.—Yellow resin (*Resina flava*) is the substance which remains after this distillation; and is much used in antiseptic ointments and cerates. For other remarks on Turpentine see Stimulants.

PRUNUS spinosa. The Sloe. See Astringents.

RIBES nigrum. The Black Currant. See Astringents.

¶ *RUTA graveolens*. Decandria. Monogynia. Multifloræ. Southern parts of Europe. (Herba.) Rue. An infusion of this herb in vinegar was formerly in much esteem as an antiloimic, but is now justly disregarded as such. It has also been employed in fomentations to gangrenous ulcers; but as it possesses no superiority over chamomile or wormwood, for these purposes, it may well be erased from the catalogue of the materia medica.

CARBO

CARBO *lignarius*. (Carbonium) Charcoal. Carbon. Charcoal duly prepared from wood, and reduced to a fine powder, has been applied to foul ulcers and mortified parts with apparent advantage. The powder may be mixed up with boiled bread and milk, and applied in the form of a poultice. *Crell's Chemical Journal* (English Translation) Vol. III. *Beddoes* on Factitious Airs; and *Simmons' Med. Facts and Observ.* Vol. VII.

GAS ACIDUM *carbonicum*. Aër fixus. Gas Mephiticum. Carbonic Acid gas. Fixed Air. Mephitic Air. This elastic fluid is obtained for medicinal purposes by pouring vitriolic acid upon chalk or marble. The gas thus extricated may be combined with water (pure or with additions) by means of an apparatus, in common use, invented by Nook. Water thus impregnated with the carbonic acid gas is prescribed with good effect to patients labouring under typhus and other malignant fevers. It may be drank in the same quantities as pure water.—Much of the efficacy of the acidulous soda-water depends upon its saturation with this air; which is likewise a principal agent in the saline effervescent draughts (being extricated from the prepared kali on the admixture of vinegar or lemon-juice) and in all fermented bottled liquors, when in a sparkling state.

Besides

Besides being taken in these ways into the stomach, it has also been frequently drawn into the lungs in certain diseases of that organ, and particularly in the advanced stage of phthisis pulmonalis. (*Percival's Essays*, Vol. I.) In this disorder, however, it has disappointed expectation in some late trials. Externally it has been applied to foul and cancerous ulcers with temporary good effect. (*Ewart's two Cases of Cancer*, 1794.) But even here it seems to act merely as a palliative. Whatever efficacy the Fermenting-Cataplasm (*Thesaur. Med.* p. 180) possesses, it is wholly to be ascribed to this gas which is gradually evolved from it. See *Beddoes's* publications on Facitious Airs. Also, *Pearson* on the Different Kinds of Air, 1795.

FERMENTUM *cerevisiæ*. Spuma *cerevisiæ* fermentantis. Flos *cerevisiæ* fermentantis. Yeast or Yest. Within these few years this substance has been cried up as an excellent remedy in malignant fevers. Various testimonies have been produced for and against its antiseptic virtues. At present the evidence on both sides is nearly equal; it is therefore a matter which must lie over for future decision. It is given internally in doses of a table-spoon full, mixed with water, porter, or wine and water. [In the last case, how much may be owing to the Wine!] Externally it has been

been applied to foul ulcers in the form of a cataplasm. It seems to promise more success as an outward than as an inward remedy. Whatever may be its effects, they are to be ascribed partly to the carbonic acid and partly to the bitter principle of the hop which it contains. See *Beddoes's Considerations on Factitious Airs, and Medical and Physical Journal* for 1800 and 1801.

CEREVISIA. Malt liquor. (See Vol. I. p. 102) Fresh table beer, spruce beer, porter and bottled beer, are good antiscorbutics, and are often administered in low and malignant fevers, with the best success. It is only when they have too laxative an effect that their use in such cases becomes improper.

VINUM. Wine. (See Vol. I. p. 104) In the advanced stage of typhus and other malignant fevers, and in mortifications, Port Wine is perhaps the most powerful of all antiseptics. In such disorders it may be given to the quantity of several pints within the space of twenty-four hours.—Claret is preferable to port wine in many of these cases.—Perry and Cyder, which may be considered as weaker sorts of wine, may be employed for the same purposes.—In the fevers above-mentioned it is a proof that wine and other fermented liquors agree, if, during their use, the
tongue

tongue becomes more moist, the skin more soft, the pulse less frequent and more full, and the affection of the brain more moderate. Where the contrary effects are observed, they should be diminished or discontinued.

SPIRITUS vini. (Vol. I. p. 105) Spirit of Wine. Ardent Spirits. Brandy is sometimes employed internally in the last stage of petechial fevers, gangrenous fore throats, and in the black-vomiting of the yellow-fever; in which last it is perhaps more to be relied upon than any other medicine; but in the common low and malignant fevers of this country it is seldom adviseable to exhibit it otherwise than in a state of dilution with water and admixture with acids, as in the state of Punch; a liquor which may in some measure supply the place of wine.—Externally spirit of wine is employed, alone or combined with camphor, as an embrocation and fomentation in bruises and mortification.

(3) *From the Mineral Kingdom.*

AQUA frigida. In malignant and pestilential fevers Cold Water, employed internally and externally, in the manner and with the cautions mentioned under Refrigerants, proves a most powerful antiseptic. If saturated with the carbonic

bonic acid gas or mixed with vinegar, it is, in the opinion of some practitioners, still more efficacious.

ACIDUM muriaticum. Muriatic Acid. (*Spiritus Salis Marini.*) See Refrigerants. This acid, added to water in such quantities as render it pleasantly sharp to the taste, affords an useful medicine in typhus and other malignant fevers; but we must not imagine with a modern German physician, Professor *Reich*, that this and the other mineral acids are, without the aid of other agents, adequate to the cure of all fevers. They are even hurtful in some conditions of fever. It may likewise be prescribed in gargles in the cynanche gangrænosa. For these purposes however does it possess any advantage over the vitriolic acid? (*Fordyce* on the Virtues of Muriatic Acid in the cure of putrid diseases, 1789.) The muriatic acid vapour, extricated from sea-salt by pouring strong vitriolic acid upon it, is often employed for fumigating the apartments of those who have laboured under infectious fevers. The oxygenated muriatic vapour or oxy-muriatic vapour (obtained by mixing pulverized manganese with the salt, before the vitriolic acid is added) answers still better for the fumigating process than the common acid vapour. See *Guyton-Morveau* in the *Annales de Chimie*, 1801, and *Rollo's* Account of the Artillery Hospital at Woolwich, 1801.

KALI

KALI oxymuriatum. Lixiva oxymuriata. Murias oxygenatus potassæ. Oxymuriated kali. Oxymuriated lixiva. Oxygenated muriat of potash. A salt compounded of the vegetable alkali and the oxygenated muriatic acid. It has lately been employed with good effect in cases of typhus. Dose from three to five grains. *Garnett* in *Duncan's Annals of Medicine*, Vol. II. and III. Also *Medical and Physical Journal*, 1801.

ACIDUM vitriolicum. Vitriolic acid. (See Refrigerants) This acid is employed in malignant fevers, diluted with water, in the same manner as the muriatic acid; but it is more frequently mixed with decoctions of cinchona, angustura, contrayerva, &c. It is also employed in gargles. Dose of the diluted acid (*Acidum vitriolicum dilutum*, Ph. Lond.) twenty or forty drops.—The *Acidum vitrioli aromaticum*, Ph. Ed. (formerly called Elixir vitrioli acidum) is made by mixing (cautiously) six ounces of vitriolic acid with two pounds of rectified spirit of wine, and digesting in a gentle heat for three days; afterwards adding an ounce and a half of cinnamon, and one ounce of ginger, and digesting again for six days; then filtering. Dose thirty to sixty drops, in water, decoction of cinchona, &c.—*Spiritus Ætheris vitriolici*, Ph. Lond. et Ed. (formerly called *Spiritus vitrioli dulcis*.) see p. 43. Sixty or eighty drops of this dulcified
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acid may be given for a dose (joined with camphor or other aromatics) in malignant fevers. See *Carmichael Smyth* in *Med. Communications*, Vol. I. Also on the Jail Distemper, 1795.

ARGILLA vitriolata. (Alumen) Vitriolated Argill. Alum. Joined with the Peruvian bark, this earthy salt is sometimes prescribed in malignant fevers accompanied with hæmorrhages. (*Wall's Medical Tracts*, 1780.) It is a common and useful addition to antiseptic gargles, and is also employed in lotions against aphthous affections of the mouth and tongue. For other remarks on this substance, and for an account of its preparations and doses, see *Astringents*.

ARGENTUM nitratum. (Causticum lunare.) Nitrated Silver. Lunar Caustic. Solutions of this metallic salt have lately been applied with advantage to foul ulcers. (*Home*, as before quoted; and *Rollo* on Diabetes, 1798.) Of its use internally notice will be taken under *Antispasmodics*.

CUPRUM ammoniatum. Ammoniated Copper. The *Aqua Cupri ammoniati*, Ph. Lond. (formerly *Aqua sapphirina*) may be employed externally for the same purposes as the other preparations of this metal hereafter-mentioned. It is obtained by adding one drachm of sal ammoniac to a pint of lime-

lime-water, and letting them stand together in a copper-vessel until the ammonia is saturated with the copper.—It is also used as an application to the eye in certain affections of that organ.—There is a preparation similar to the above in the Ph. Ed. under the title of *Aqua Æruginis ammoniatæ*. It is made by mixing together eight ounces of lime-water, two scruples of sal ammoniac, and four grains of verdigrise. After standing for twenty-four hours it is filtered.

CUPRUM acetatum. (Ærugo.) Acetated Copper. Verdigrise. This metallic preparation is not a perfect neutral salt, but consists of carbonate of copper combined with some acetous acid. It is employed by the Surgeons to cleanse foul ulcers. *Oxymel Æruginis*, Ph. Lond. (formerly called *Mel Ægyptiacum*) is made by dissolving one ounce of verdigrise in seven ounces of vinegar, then adding fourteen ounces of honey, and boiling the whole to a proper consistence. It is applied to aphthæ and other ulcerations. In the Ed. Ph. there is an *Ung. Æruginis* which is applied to foul sores and ulcerated conditions of the eyes and eye-lids.

CUPRUM vitriolatum. (Vitriolum cœruleum.) Vitriolated Copper. Blue vitriol. Solutions of this metallic salt are employed as lotions to foul ulcers. The *Aqua cupri vitriolati*, (Aqua Styptica)

Ph. Ed. though commonly applied to stop hæmorrhages, may be used for the same purposes.

¶ *NATRON boracicum.* (Borax.) This is an imperfect neutral salt, in which the boracic acid is supersaturated with the natron or soda. It was formerly much employed in lotions against aphthous affections of the mouth and tongue, combined with honey or honey of roses; but for this purpose it is inferior to alum or vitriolated zinc; and is therefore now seldom prescribed.

ACIDUM nitricum. Nitric acid. The nitric acid vapour, extricated from nitrated kali by pouring upon it vitriolic acid, is employed for fumigating hospitals and sick-rooms, in the same manner as the oxy-muriatic vapour. N.B. In this mode of fumigation, as well as in that of the muriatic acid, glazed earthen pipkins or gallipots must be employed. See *Smyth's Account of Experiments made on board the Union Hospital-Ship, 1796.* Also on Nitrous Fumigation, 1799.

The Nitric Acid (*Acidum nitrosum*, Ph. Lond.) diluted with water, in the proportion of about a scruple of the acid to half a pint of water, has likewise been successfully employed as a lotion for foul ulcers. See *Home's Practical Observations on Ulcers, 1797.*

TABULAR

TABULAR VIEW
OF
THE CONTENTS OF CLASS VI.

ASTRINGENTS.

N. B. Several of the Articles here enumerated cannot in strict propriety of language be termed astringents, but are inserted amongst such medicines for the reason assigned at page 71.

(1) <i>From the Animal Kingdom.</i>	<i>Maranta arundinacea.</i> Indian Arrow-root.
<i>Acipenser Huso.</i> The <i>Ifinglass</i> .	<i>Mimosa Catechu.</i> <i>Catechu.</i>
<i>Cervus Elaphus.</i> The Stag.	<i>Iufufum catechu.</i> Tinctura
<i>Cornu Cervi usum.</i> Burnt Hartshorn.	<i>Catechu.</i> Infusion and Tincture of <i>Catechu.</i>
(2) <i>From the Vegetable Kingdom.</i>	<i>Papaver Somniferum.</i> The White Poppy.
† <i>Æsculus Hippocastanum.</i> The Horse Chestnut.	<i>Opium purificatum.</i> Purified opium.
† <i>Arbutus Uva Ursi.</i> Bear's Whortleberry.	<i>Pulvis opiatu.</i> Opiate Powder.
<i>Cinchona officinalis.</i> Peruvian Bark.	<i>Pulvis cretæ compositus cum Opio.</i> Compound powder of Chalk with Opium.
<i>Cycas Circinalis.</i> The Sago-Palm.	<i>Confectio opiata.</i> Opiate Confection.
<i>Hæmatoxylum campechianum.</i> Logwood.	† <i>Polygonum Bistorta.</i> Bistort.
<i>Juglans regia.</i> The Walnut.	<i>Prunus spinosa.</i> The Sloe.
<i>Kino.</i> The Red astringent Gum of <i>Gambia.</i> <i>Kino.</i>	<i>Pterocarpus Draco.</i> Dragon's Blood.

<i>Punica Granatum.</i> The Pome- granate.	(3) From the Mineral King- dom.
<i>Quassia Simarouba.</i> Simarouba.	<i>Argilla vitriolata.</i> Vitriolated Argill or Alum.
<i>Quercus Cerris.</i> The small prickly cupped Oak.	¶ <i>Bolus Gallicus.</i> French Bole.
<i>Gallæ.</i> Gallnuts.	¶ <i>Bolus Armenus.</i> Armenian Bole.
<i>Quercus Robur.</i> The Common Oak.	<i>Calx viva.</i> Quick-lime.
<i>Rosa Gallica.</i> The Red Rose.	<i>Creta præparata.</i> Prepared Chalk.
<i>Salix alba.</i> The White Willow.	<i>Plumbum acetatum.</i> Acetated Lead.
<i>Salix fragilis.</i> The fragile Willow.	<i>Cerussa acetata.</i> Acetated Cerusse.
<i>Salvia officinalis.</i> Sage.	<i>Zincum vitriolatum.</i> Vitria- lated Zinc.
¶ <i>Symphytum officinale.</i> Com- frey.	
<i>Tormentilla erecta.</i> Tormentil.	
<i>Resina Flava Novi Belgii.</i> Yel- low Gum of Botany Bay.	

CLASS VI.

ASTRINGENTS.

SOME of the following substances (such as the ichthyocolla and cornu cervi among the animal; sago and arrow-root among the vegetable; chalk and bole among the mineral substances) do not strictly belong to this class, being destitute of the astringent principle: but as they are frequently employed for restraining alvine and other profluvia, and in that respect co-incide with the genuine astringents; it was thought right to insert them here, referring for observations upon them to their respective places under Demulcents and Absorbents.

(1) *From the Animal Kingdom.*

ACIPENSER *Huso*. The Hinglas Fish. (See Demulcents.) Ichthyocolla. Jellies made by boiling this substance in milk or water, sweetened and aromatized, are useful in cases of chronic diarrhoea.

CERVUS *Elaphus*. The Stag. (Vol. I. p. 6)
Jelly prepared from the rasped horns is suited to the same cases as the preceding.—The Decoction of the burnt bones possesses similar properties, and is especially useful where the lax state of the intestines proceeds from, or is accompanied with, acidity. See Absorbents.

(2) *From the Vegetable Kingdom.*

The number of astringent vegetables is so great, that the bare catalogue of them would occupy a large portion of an octavo volume. We shall therefore content ourselves with noticing very few besides those which have a place in the Pharmacopæias of the London and Edinburgh colleges.

¶ *ÆSCULUS Hippocastanum*. The Horse Chestnut. See Tonics.

¶ *ARBUTUS Uva Ursi*. Decandria. Monogynia. Bicornes. Frutex. Indigenous. (Folia.) Bear's Whortleberry. About thirty years ago this plant was held in high esteem as a remedy in calculous and nephritic complaints, and was particularly extolled by the celebrated *de Haen* of Vienna. Since that time its doubtful efficacy in the majority of such cases has caused its reputation to

to dwindle away, and it is now rarely, if ever, prescribed in this country. Dose of the powder from fifteen grains to half a drachm. It is also given in infusions. (*Thesaur. Med.* p. 189.) *De Haen* Rat. Medendi, Vol. I. II. and III. *Murray* Commentatio de Arbuto Uva Urſi, 1765, and reprinted in Vol. I. of his *Opuscula*.

CINCHONA officinalis. (See Antiseptics) Peruvian Bark. The decoction of this bark, combined with alum and other astringents, is often employed in cases of hæmorrhage, diabetes, and fluor albus. See Tonics.

CYCAS Circinalis. The Sago-Palm. See Demulcents.

HÆMATOXYLUM campechianum. Decandria. Monogynia. Lomentaceæ. Arbor. West-Indies. (*Lignum Campechianum*. *Lignum campechense*.) Logwood. This is a pleasant and useful astringent in cases of obstinate diarrhœa, and in the advanced stages of dysentery. A decoction may be prepared by boiling the wood in water; but the Extract is preferred by most practitioners dissolved in peppermint-water, or cinnamon-water, and given in the form of draughts or a mixture. (*Thesaur. Med.* p. 195.) It may also be administered clysterwise. Dose of the extract from fifteen grains

grains to half a drachm, or more. It is to be impressed on the minds of young practitioners, that this and the other astringents hereafter mentioned, are highly improper in the early periods of dysenteric affections; it is only in the protracted stage that they are useful. In this respect the preliminary observations to the class Absorbents will apply here. See also the sixth and seventh chapters of *Zimmerman's Treatise on the Dysentery*.

JUGLANS *regia*. Monœcia. Polyandria. Amentaceæ. Arbor. Persia, but naturalized to the temperate parts of Europe. (Fructus immaturus. Putamina Nucum viridia.) The Walnut. A decoction made by steeping an ounce of the green outer shells of the fruit for three or four hours in a pint of water, then boiling the whole together for a quarter of an hour and straining, has been applied with good effect, by means of lint or compresses of fine rag wet therewith, to fungous and other ulcers. (Transactions of the Josephine Academy at Vienna, Vol. I.) For other remarks on this fruit and its preparations, see Anthelminthics,

KINO. Gummi rubrum astringens Gambiense. (Gummi-resina.) Kino. The red astringent gum. The red gum of Gambia. This gum-resin is frequently

quently and successfully employed in diarrhœas, fluor albus, and uterine hæmorrhages, in doses of fifteen to thirty grains, diffused by means of mucilage with aqueous and aromatic liquors. In the Edinburgh Pharmacopœia there is a combination of it with alum, under the title of *Pulvis Aluminis compositus* (vulgo Pulvis Stypticus.) It consists of alum four parts, kino one part. Dose fifteen grains to half a drachm, in pulmonary and uterine hæmorrhages. It is also an ingredient in the *Electuarium catechu*, Ph. Ed. See *Mimosa catechu*. The *Tinctura Kino*, Ph. Ed. is made by digesting for eight days two ounces of this gum-resin in a pound and a half of proof spirit. Dose one or two drachms mixed up with aqueous liquors by means of mucilage. *Fothergill* in Med. Obs. and Inquiries, Vol. I. and reprinted in his Works.

MARANTA *arundinacea*. Indian Arrow-root.
See Demulcents,

MIMOSA *Catechu*. Polygamia. Monœcia. Lomentaceæ. Arbor. East-Indies. (Catechu. Extractum Catechu. Succus spissatus Terra Japonica dictus.) The inspissated gummi-resinous juice of this tree, called by the inappropriate name of terra japonica, is one of the most valuable medicines of the astringent-class, and is frequently employed, with the best success, in the same cases

as

as the kino. Being less stimulant than the last-mentioned resin, it is better suited to the majority of hæmorrhagic cases, as well as to some species of alvine fluxes. It is equally useful in gleet and fluor albus; nor has it been wanting of efficacy in diabetes. In the form of a dentifrice or collutory it has been employed with advantage in scorbutic affections of the gums and mouth. By reason of the mucilaginous, and extractive matter which it contains, it is miscible *per se* with aqueous liquors. It is given in doses of one or two scruples. The *Electuarium Catechu*, Ph. Ed. (formerly called *Confectio Japonica*) is composed of catechu four ounces, kino three ounces, cinnamon and nutmeg, each one ounce, opium (softened with white wine) one drachm and a half, syrup of red-roses (boiled to the consistence of honey) two pounds and a quarter. Dose, two scruples to a drachm and a half, in diarrhœas, and in the advanced stages of dysentery. The *Infusum Catechu*, Ph. Ed. (formerly called *Infusum Japonicum*) is made by macerating two drachms and a half of catechu, and half a drachm of cinnamon in seven ounces of boiling water, for a couple of hours; then filtering and adding one ounce of simple syrup. Dose two or three table-spoons full, occasionally. The *Tinctura Catechu*, Ph. Lond. (formerly called *Tinctura Japonica*) is made by digesting, for ten days, three ounces of catechu, and two ounces of

cinnamon,

cinnamon, in a quart of proof spirit. The *Tinctura Catechu*, Ph. Ed. is made by digesting for eight days the same quantities of catechu and cinnamon, in two pounds and a half of proof spirit. Dose of either one or two drachms, incorporated by means of mucilage with common water, cinnamon-water, peppermint-water, camphor-mixture, &c.—(*Thesaur. Med.* p. 197.) This, as Professor Murray has remarked, is the least useful of all its preparations.—Kerr in Vol. V. of *Med. Obs. and Inquiries*. Murray de Catechu, 1779, and reprinted in Vol. II. of his *Opuscula*.

PAPAYER *Somniferum*. (See Narcotics.) The White Poppy. The exsiccated juice (Opium) and Tincture, are frequently employed alone and in combination with absorbents, astringents, and aromatics, (see *Pulvis Opiatus*, and *Pulvis Cretæ compositus cum Opio* under Absorbents; and *Confectio Opiata* under Narcotics) in alvine fluxes, in diabetes, and in uterine and pulmonary hæmorrhages; in which last, however, it is obvious that aromatic additions to it are highly improper. In cholera, and in the symptomatic diarrhœas which occur in the advanced stage of malignant fevers, the different forms of opiates are eminently useful by restraining the inordinate evacuations, and thereby preventing the dangerous consequences that would otherwise follow from debility and exhaustion.

exhaustion. They are likewise serviceable in certain stages of dysentery; in which, however, their premature exhibition has often been productive of great mischief. *Sir John Pringle* has remarked, that opiates should never be given in dysentery until the patient has had sufficient evacuations, otherwise by confining the morbid cause, they aggravate all the symptoms. *Sir George Baker* found them not advisable in this disorder until the stools became nearly of their natural consistence. *Dr. Donald Monro* observed in his practice that when administered in the first period of dysentery, opiates generally checked the alvine discharge too suddenly and strongly, whence the tormina and fever were increased. He, therefore, waited till the bowels had been well evacuated, and then prescribed them only in moderate doses, (chiefly at night) so as to alleviate pain and procure some sleep; but never in such quantities as to induce stupor, or entirely restrain the flux. (See *Zimmerman* on the Dysentery, Chap. VII. where similar precautions are adduced from other celebrated practitioners.) Joined with alum and the extract of cinchona, opium is advantageously employed in diabetes; and in combination with vitriolated zinc and digitalis, in uterine and pulmonary hæmorrhages.

¶ POLYGONUM *Bistorta*. *Ocstandria*. *Trigynia*.
Oleraceæ.

Oleraceæ. Indigenous. (Bistorta. Radix.) Bistort.—The root of this plant has long held a place in the Pharmacopœias of the London and Edinburgh colleges. It undoubtedly possesses considerable astringency; but by no means more than several other vegetables of this class, and even less than some of them. We therefore deem it to be wholly superfluous.

PRUNUS *spinosa*. Icosandria. Monogynia. Pomaceæ. Frutex. Indigenous. (Prunus sylvestris. Fructus.) The Sloe. The fruit of this shrub is a cooling, powerful, astringent; and accordingly the Conserve prepared by mixing its pulp with thrice its weight of fine sugar, is occasionally employed for checking diarrhœas. Infusions are also sometimes prepared from the conserve and employed as gargles, in cases of angina, and scorbutic affections of the gums.

PTEROCARPUS *Draco*. Diadelphia. Decandria. Papilionaceæ. South America and the East-Indies. Arbor. (Succus resinofus Sanguis Draconis dictus ex arbore incisa promanans soleque exsiccatus) Dragon's blood. The dark red substance which goes under the name of Dragon's blood, is said to be obtained from other trees besides this; as well as from a species of the Rattan cane, Calamus *Rotang*, (see Murray's Apparatus, Vol. V. p. 301, and

and *Woodville's Med. Bot.* Vol. III. p. 475) growing in CochinChina, Malacca, and other parts of the East-Indies. It is of a gummi-resinous, nature and possesses considerable astringency; in consequence of which it is sometimes prescribed in laxities of the intestinal canal, in fluor albus, and in cases of hæmorrhage. For most of these purposes, however, it is inferior to the catechu and kino. Dose, fifteen or twenty grains. From an opinion, which seems to rest on a very slight foundation, it has for a great length of time been used externally, in the composition of healing and strengthening plasters. It is one of the ingredients in the *Emplastrum Thuris compositum*, Ph. Lond.

PUNICA Granatum. Icosandria. Monogynia. Pomaceæ. Arbor. Southern parts of Europe. (*Granatum.* Flores *Balaustia dicti*; nec non cortex *Fructûs.*) The Pomegranate. The flowers, called *Balaustines*, and the rind of the fruit are powerfully styptic. Decoctions prepared from the flowers, and rind (*Thesaur. Med.* p. 199) have sometimes been prescribed for restraining the colliquative diarrhœa and sweats which accompany hectic fever; but they are more frequently and perhaps more properly employed in the form of injections and gargles, in cases of leucorrhœa and angina.

QUASSIA

QUASSIA *Simarouba*. (See Tonics.) *Simarouba*.

QUERCUS *Cerris*. Monœcia. Polyandria. Amentaceæ. Arbor. Southern parts of Europe and the Levant. (Gallæ, nidi feu domicilia insectorum ex Cynipidis genere. Gallæ turcicæ.) The small prickly cupped Oak. Gallnuts, which are the nests or habitations of insects belonging to the genus cynips, are found upon the common oak as well as upon this species; but as those which are imported from Aleppo, and which are collected from the quercus *cerris*, are what (being deemed the best) are met with in the shops; it appeared right to notice them apart under this article. Although these excrescences, improperly termed nuts, are the covering or abodes of insects, yet they are of a vegetable nature, and derive the whole of their astringency from the oak itself. Of all astringent substances, Gallnuts are the most powerful. They are generally considered as too rough to be taken into the stomach; though authorities are not wanting for their employment internally against agues and other disorders. According to *Dr. Cullen*, they may be safely given in combination with gentian and other bitters; but the remark made on this subject by *Murray* (*Apparatus Med.* Vol. VI. p. 9) appears to us very judicious; viz. that we should be cautious of using such strong astringents as the present in the

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treat-

treatment of intermittents, since they only suspend for a while, instead of completely removing the disorder, and are apt to lay the foundation for visceral obstructions.—With more propriety are Gallnuts prescribed in infusions for injections and gargles; and it is said that one part of the pulverized nuts mixed up with eight parts of hog's lard (*Thesaur. Med.* p. 203) forms an useful application against the blind piles.

QUERCUS Robur. Class and order, the same as above. Indigenous. (Cortex.) The Common Oak. Like other astringent vegetable substances oak-bark has been employed for the cure of intermittent fevers, diarrhoea and fluor albus; but in regard to its internal exhibition in these and other disorders, the caution thrown out above on the subject of galls, will in a great measure apply here. By combining it, indeed, with bitters (*Thesaur. Med.* p. 188) and perhaps with a small quantity of opium, the mischief to be apprehended from its strong stypticity may, in some degree, be counteracted. Let us not however deceive ourselves with the idea that, by such modes of combination, we can render the bark of this tree equally efficacious as a febrifuge and a tonic with the Peruvian bark; yet it has been termed the *Cinchona* of Europe. (*Helvig de Quinquina Europæorum*, 1712.) Decoctions of Oak bark are employed

sugar. N. B. This infusion must be prepared either in glass or china vessels.—Half an hour appears to be too short a time for the maceration; accordingly, in their Formula, the Edinburgh College have directed the petals and water to stand together for the space of four hours. In other respects the *Infusum Rosarum*, Ph. Ed. coincides with that of the London College, excepting that in the Edinb. there is half a drachm of the undiluted vitriolic acid to two pints and a half of the infusion, which gives it a greater degree of acidulation than the London infusion. Both these preparations are given internally in doses of two or three ounces; and are used topically as gargles, in the cases before-mentioned.—The *Conserva Rosæ*, Ph. Lond. et Ed. is made by beating up the petals with a sufficient quantity of refined sugar; and is employed, in combination with nitre or alum or catechu, and a few drops of tincture of opium, in hæmorrhages from the lungs and uterus. Dose half a drachm or two scruples. (See Refrigerants, p. 39.) The *Mel Rosæ*, Ph. Lond. (formerly *Mel rofaceum*) is obtained by macerating for six hours in three pints of hot water four ounces of the petals; then straining the liquor and adding to it five pounds of clarified honey, and boiling the whole to the consistence of a syrup. It is added to gargles, and lotions for the mouth, in cases of sore throat and aphthæ.—The *Syrupus Rosæ*, Ph. Lond.

Lond. and *Syrupus Rosarum rubrarum*, Ph. Ed. are chiefly employed for sweetening and colouring juleps and mixtures. Certainly their medicinal powers are insignificant.

SALIX alba. The White Willow. See Tonics.

SALIX fragilis. The fragile Willow. See Tonics.

SALVIA officinalis. Diandria. Monogynia. Verticellatæ. Southern parts of Europe. (Folia.) The leaves of this plant possess some degree of astringency, as is proved by their chemical agency on solutions of vitriolated iron. It is said that infusions of them in water or red wine and water, have been given with good effect in hectic perspirations. (*Thesaur. Med.* p. 201) in which cases their efficacy would doubtless be increased by the addition of a due proportion of vitriolated zinc and tincture of opium. The infusion of the leaves, mixed with honey and vinegar, is a well-known gargle, frequently resorted to in cases of sore throat, in this and other countries. Beyond this, what more can, consistently with accurate observation and experience, be asserted concerning the medical virtues of sage? Yet, as *Bergius* has noticed, in the year 1688, one Chr. Fred. Paulini

had the patience to write 414 pages in 8vo. on this vegetable alone!—so much did he outdo the school of Salernum.

¶ *SYMPHYTUM officinale*. Pentandria. Monogynia. Asperifoliae. Indigenous. (Consolida major. Radix et Herba.) Comfrey. Decoctions of the root and herb of this plant, were formerly employed for restraining hæmorrhages from the lungs and other viscera; but in modern practice the preference is given to the catechu, kino, and other articles of this class, which have been previously noticed.

TORMENTILLA erecta. Icosandria. Polygynia. Senticosæ. Indigenous. (Radix.) Tormentil. Half an ounce of the root coarsely pounded and boiled in sixteen ounces of water down to twelve, gives a good astringent decoction, suited to the same cases as the decoction of logwood and infusion of catechu, before-mentioned. The pulverized root is an ingredient in the *Pulvis Cretæ compositus*, Ph. Lond. for the doses and uses of which, see the article Creta.

RESINA FLAVA *Novi Belgii*. Botany Bay Gum or Resin. (*Acoroides resinifera*.) This resinous

resinous substance, which is of a yellow and yellow-red colour, has lately been employed and recommended in alvine fluxes and other disorders requiring the aid of astringent medicines. It may be given in substance, triturated with mucilage of gum arabic, and thereby incorporated with any of the distilled aromatic waters; or the tincture prepared from it may, by the same means, be mixed with common water, and be taken in the form of draughts. Of the resin the dose is from fifteen grains to half a drachm; of the tincture one or two drachms. Has it any advantages over the kino? *Kite* on the *Acoroides resinifera* or Yellow Gum of Botany Bay, in Vol. IV. of the Memoirs of the Med. Society of London; and *Chamberlaine* in the Med. and Phys. Journal for 1801.

(3) *From the Mineral Kingdom.*

ARGILLA *vitriolata*. Alumen. Vitriolated Argill. Alum. Vitriolated argill should, in conformity with its title, consist of vitriolic acid and argillaceous earth only; but that saline product which goes by this name contains a portion of the vegetable alkali (in addition to the argill) in combination with the vitriolic acid: and in some instances other matters are also joined with it.

Fourcroy *Connaissances Chimiques*, Tom. III. sect. 5.) But these contaminations are of little consequence, in regard to its use as a drug. Some sorts of alum contain an impregnation of iron; from which (or any other metallic additament) they may be freed by the purifying process (*Aluminis purificatio*) directed by the College.

Alum holds a principal place among astringent medicines; and is frequently and successfully employed in cases of diarrhœa, diabetes (*Mead*, *Brocklesby*, *Vogel*,) fluor albus, and hæmorrhages from the nose, lungs, and uterus. (*Helvetius*, *Cullen*.) On these occasions it is joined with mucilages, camphor, catechu, extract of cinchona, opium, &c.—It is also added to gargles and lotions for the throat and mouth, in cases of angina and aphthæ. Of its use as an auxiliary to the cinchona in intermittent fevers, and to opium in certain species of colic, notice will be taken under Tonics. Dose from five to fifteen grains; in larger doses it is apt to vomit and purge.—The *Pulvis Aluminis compositus*, Ph. Ed. (vulgo *Pulvis Stypticus*) of which this earthy salt is the basis, has been already noticed under the article kino, where its uses and doses are mentioned. *Serum lactis aluminosum* (Alum Whey) is prepared by boiling a drachm or two of alum in a pint of milk and afterwards straining. (*Thesaur. Med.* p. 198.) Two or three ounces

ounces are given for a dose, in diabetes.—Alum is added to gargles either in its crude state (pulverized) or deprived of its water of crystallization by exposure to heat, in which state it is termed burnt alum. (*Alumen Ustum*.) One drachm of the crude alum or half a drachm of the burnt alum, to a pint of any astringent decoction or infusion, will be found a sufficient proportion. (*Thesaur. Med.* p. 206.)—The *Cataplasma Aluminis*, Ph. Lond. (formerly called *Coagulum aluminosum*; Alum Curd) is made by shaking a piece of alum with the white of egg, until the latter is curdled. It is used in some species of ophthalmia, spread upon rag and applied in bed.—The *Aqua Aluminis composita*, Ph. Lond. (formerly *Aqua aluminosa Bateana*) is made by dissolving half an ounce of alum, and half an ounce of vitriolated zinc, in a quart of boiling water. It is used for collyria, lotions, and injections.—Alum is an ingredient in the *Aqua Cupri vitriolati composita*, Ph. Ed. for which see the article *cuprum* farther on. *Seydler de Alumine ejusque Ufu medico*, 1772. *Lind de Aluminis virtute medica*, 1784.

¶ *BOLUS Gallicus et Armenus*. French and Armenian Bole. See Absorbents.

CALX pura. *Calx viva*. Quicklime. The *Aqua calcis*, Ph. Lond. et Ed. is sometimes useful
in

in the diarrhœa which occurs in hectic disorders (where it is often added to ass's or cow's milk made warm) in diabetes and fluor albus. Its preparation and doses have been already mentioned under Absorbents.

CRETA præparata. Prepared Chalk. Useful in the same cases as the preceding. See Absorbents.

CUPRUM vitriolatum. (*Vitriolum cœruleum.*) Vitriolated Copper. Blue vitriol. This metallic salt is chiefly employed externally by the surgeons as an escharotic (see Antiseptics) and dissolved in large quantities of water, as a collyrium in purulent ophthalmies. To this last purpose is adapted the *Aqua cupri vitriolati composita*, Ph. Ed. (formerly called *Aqua styptica*) which consists of vitriolated copper and alum, each three ounces, water two pounds, vitriolic acid an ounce and a half. The alum and vitriol are dissolved in the water by boiling, after which the liquor being filtered, the acid is added to it. When used as a collyrium this must be further diluted with water. Pledgets dipped in this solution are put up the nostrils to stop bleedings from the nose.—Some practitioners have ventured to prescribe vitr. copper internally in cases of hæmorrhage, and in alvine fluxes, in doses of an eighth or a quarter of a grain; but for these purposes

purposes the vitriolated zinc is to be preferred, being a safer medicine and producing the same effects when given in larger doses. Concerning the employment of this metallic salt in intermittents, see Tonics,

PLUMBUM *acetatum*. Cerussa *acetata*. (Saccharum Saturni.) Acetated Lead. Acetated Cerusse. Sugar of Lead. This, like all the saline preparations of lead, is powerfully restraining; and has accordingly been prescribed internally by some practitioners, in cases of pulmonary and uterine hæmorrhage, in doses of half a grain to a grain and a half, made into pills with rose-conserve, and joined with opium. (*Theaur. Med.* p. 190. *Reynolds* in Vol. III. of the *Med. Transact.* of the Lond. Coll. of Physicians.) Many physicians have been deterred from the exhibition of acetated lead in these and other cases by the consideration of the deleterious effects which those persons experience, who are frequently or constantly exposed to the effluvia arising from this metal, in the working of mines, the smelting of ores, and in certain arts, trades, and manufactures; but, as *Dr. Donald Monro* (*Med. and Pharmaceutical Chemistry*, Vol. I. p. 281) has remarked, its occasional exhibition, in the manner above proposed, is very different from its being taken

taken into the body constantly, and for a great length of time. He has seen several instances where it has produced the best effects in the cases above-mentioned, without producing the least inconvenience: he therefore thinks that where other medicines fail, and the patients are in danger of dying from the bleeding, a physician is justified in ordering this metallic preparation. Should any symptoms of colica pictonum occur during its use, it will be proper to desist and to remove them by the proper laxative and demulcent remedies. Where, from peculiar irritability of the stomach and intestinal canal, it produces this effect in the small doses before-stated, even though combined with opium, it should be discontinued, and some other medicine of this class should be prescribed in its place. Acid liquors must be withheld during its use. In our own practice we have generally given the preference to vitriolated zinc, administered in nauseating doses; and thus have had no occasion to counteract those mischievous effects on the bowels which this and other preparations of lead are so liable to produce.—Acetated cerusse is frequently employed in injections against gleet and gonorrhœa. For this purpose half a drachm or two scruples may be dissolved in eight ounces of water. (*Thesaur. Med.* p. 209.) When used as a collyrium, the proportion of the metallic

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lic salt in the solution should not exceed two or three grains to every ounce of water. See Refrigerants.

ZINCUM vitriolatum. (Vitriolum album.) Vitriolated zinc. White Vitriol. This is an useful astringent in pulmonary and uterine hæmorrhages, made into pills with rose-conserve, and given in doses of half a grain or a grain, at intervals of two or three hours; until it excites considerable nausea, when it should be suspended till that effect goes off, and repeated again, if the bleeding should continue. On these occasions it may be joined with opium, digitalis, and other auxiliaries. It will rather promote than impede the operation of this medicine to give at the same time cold liquors acidulated with the vitriolic acid. For other observations, on its internal use, see Tonics.—Vitriolated zinc is a common and useful ingredient in eye-waters, in which camphor is sometimes joined with it, as in the instance of the *Aqua zinci vitriolati cum camphora*, Ph. Lond. See Refrigerants.

TABULAR VIEW
OF
THE CONTENTS OF CLASS VII.

TONICS.

(1) <i>From the Vegetable Kingdom.</i>	¶ <i>Gentiana Centaurium.</i> Lesser Centaury.
¶ <i>Æsculus Hippocastanum.</i> The Horse Chesnut.	<i>Gentiana lutea.</i> Gentian.
<i>Amomum Zingiber.</i> Ginger.	¶ <i>Geum urbanum.</i> Herb Bennet.
<i>Angustura.</i> Angustura bark.	¶ <i>Inula Helenium.</i> Elecampane.
<i>Anthemis nobilis.</i> Chamomile.	<i>Kæmpferia rotunda.</i> Zedoary.
<i>Arnica montana.</i> Leopard's bane.	<i>Lichen islandicus.</i> Iceland Liverwort.
¶ <i>Artemisia Abrotanum.</i> Southernwood.	¶ <i>Marrubium vulgare.</i> Horehound.
<i>Artemisia Absinthium.</i> Common Wormwood.	<i>Menyanthes trifoliata.</i> Buckbean.
<i>Artemisia maritima.</i> Sea Wormwood.	<i>Myrrha.</i> Myrrh.
<i>Brucea antidysenterica.</i> Brucea.	¶ <i>Panax quinquefolium.</i> Ginseng.
¶ <i>Centaurea benedicta.</i> Blessed Thistle.	<i>Polygala amara.</i> Bitter Polygala.
¶ <i>Cichoreum Intybus.</i> Succory or Cichory.	<i>Quassia amara.</i> Bitter Quassia.
<i>Cinchona officinalis.</i> Peruvian Bark.	<i>Quassia Simarouba.</i> Simarouba.
<i>Citrus Aurantium.</i> The Seville Orange.	<i>Quercus Robur.</i> The Oak.
<i>Colomba.</i> Columbo-root.	<i>Salix alba.</i> The White Willow.
<i>Croton Elentheria.</i> Cascarrilla.	<i>Salix fragilis.</i> The fragile Willow.
	<i>Swietenia febrifuga.</i> Febrifuge Mahogany.
	<i>Tanacetum vulgare.</i> Tansy.
	Vinum

Vinum rubrum Portugallicum. Red Port Wine.	Cuprum vitriolatum. Vitriolated Copper. Blue Vitriol.
Acidum nitricum. The nitric Acid.	Ferrum—ejus limatura et rubigo. Iron—its filings and rust.
(2) From the Mineral Kingdom.	Ferrum ammoniacale. Ammoniacal Iron.
Acidum vitriolicum. Vitriolic Acid.	Ferrum muriatum. Muriated Iron.
Acidum vitriolicum aromaticum. Aromatized vitriolic Acid.	Ferrum vitriolatum. Vitriolated Iron.
Argentum nitratum. Nitrated Silver.	Zincum calcinatum. Calcined zinc. Flowers of zinc.
Argilla vitriolata. Vitriolated Argill. Alum.	Zincum vitriolatum. Vitriolated zinc. White Vitriol.
Arsenicum. Arsenic.	
Cuprum ammoniacum. Ammoniacal Copper.	

CLASS VII.

TONICS.

¶ **ÆSCULUS** *Hippocastanum.* Heptandria.
Monogynia. Trihilatæ. Native of
Asia, but naturalized to Europe. (*Hippocastanum.* Cortex.) The Horse Chesnut. Of late
years the bark of this tree has been much ex-
tollèd by foreign writers as a substitute for the
Peruvian bark in intermittent and other fevers,
and in all cases where tonics are required. Dose
of the dried and pulverized bark half a drachm.
In decoction, an ounce to a pint and a half of
water boiled down to a pint. Of the strained
liquor an ounce and a half or two ounces may be
given at a time.—This bark possesses, it cannot
be denied, considerable astringency, with a bitter
and aromatic quality; in which respects it resem-
bles the cinchona; but in febrifuge virtues we
suspect it to be much inferior to the Peruvian
drug, and not at all preferable to the salix and
some other vegetables of this class which will be
hereafter noticed. Yet in some countries where,
in consequence of a limited commerce, the cin-
chona is either not procurable or exceedingly
scarce,

scarce, practitioners may at times be under the necessity of prescribing this. For a catalogue of writers on this article, see *Murray's Apparatus Medicaminum*, Vol. IV. and *Woodville's Medical Botany*, Vol. II.

AMOMUM *Zingiber*. Ginger. See Stimulants.

ANGUSTURA. (Cortex.) Angustura bark. South America. This is a valuable tonic, preferable in many febrile disorders to the Peruvian bark. It is particularly suited to cases of diarrhoea, and those bilious conditions of the intestinal canal (after due evacuations) which commonly prevail in this country, in the summer and autumnal seasons. Dose of the powder fifteen or twenty grains. It is also given in infusion. If we were to enumerate more particulars on this subject, we should only repeat the observations formerly made at p. 223 and 224, of the *Thesaur. Med.* Brande on the Angustura bark, 1791. *Murray* Appar. Med. Vol. VI. *Lettson* in Vol. IV. of *Memoirs of the Medical Society*, and *Winterbottom* in Vol. VII. of *Medical Facts and Observations*.

ANTHEMIS *nobilis*. (See Vol. I. p. 173, and p. 50, of the present Volume.) Chamomile. The dried flowers of this herb are justly held in high esteem as a bitter and strengthening medicine;
Vol. II. H cine;

cine; and are successfully employed not only in cases of chronic debility and bilious conditions of the stomach and intestinal canal; but likewise in certain febrile affections, particularly agues. These last have sometimes yielded to this bitter, after having resisted the action of the Peruvian bark in all forms and doses. (*Morton, Hoffman, Mead, Baker, Heberden.*) In these cases the chamomile (whether administered in substance or in infusion) is combined with myrrh, ginger, and other aromatics. (*Thesaur. Med.* p. 228—234.) It has also been found useful to join with it an alkaline salt, such as prepared kali or natron. The *Extractum Chamæmeli*, Ph. Lond. et Ed. is prescribed in debilities of the stomach, in chlorosis, &c. in doses of ten or fifteen grains, joined with myrrh and preparations of iron. *Baldinger vires Chamomillæ*, 1775. *Groote virtus Chamæmeli antipyretica nuperis aliquot experimentis illustrata*, 1783.

ARNICA *montana*. Leopard's-bane. See Stimulants.

¶ ARTEMISIA *Abrotanum*. (See p. 52 of this Volume.) Southernwood. Infusions of this herb have sometimes been prescribed in cases where bitters have been required; but as it possesses no advantages over the following species of artemisia, it may well be dispensed with.

Artemisia

Artemisia Absinthium. (Ibid. p. 52.) Common Wormwood.

¶ *ARTEMISIA maritima.* (Ibid. p. 52.) Sea Wormwood. These two last species have been frequently prescribed in infusions, in cachectic, hydropic, and worm-cases; but, as we have before remarked, there can be no occasion for retaining on the list of the materia medica, more than one species of this genus; which should perhaps be the *artemisia absinthium*.—In the Ph. Lond. there is a *Conserva Absinthii maritimi* which is used by some as a stomachic and antiscorbutic. Dose one or two drachms. *Febr de Absinthio analecta*, 1668.

BRUCEA antidysenterica. Diœcia. Tetrandria. Frutex. Abyssinia. (Cortex. Radix.) Brucea. The bark and root of this shrub possess considerable bitterness, and are employed with great success by the Abyssinians in alvine fluxes. Of the pulverized bark or root fifteen grains may be given for a dose. In decoction or infusion three drachms or half an ounce may be employed to a pint of water. It were to be wished that this drug could be imported into this country from Abyssinia, through Egypt.—Might it not also be procured in another direction through our commerce to the Red Sea, and be introduced into

our East-India Settlements with very great advantage? See Vol. V. of *Bruce's Travels* to discover the Source of the Nile, 1790.

¶ *CENTAUREA benedicta*. (See Vol. I. p. 174.) Blessed Thistle. As a bitter and stomachic not at all preferable to chamomile, buckbean, or quassia; and may therefore be rejected. Yet it has been dignified with the pompous titles of *asylum languentium, medicina patrumfamilias polychresta, verusque pauperum thesaurus!*

¶ *CICHOIREUM Intybus*. Syngenesia. Polygamia. Æqualis. Compositæ. Semiflosculosæ. Indigenous. (Cichoreum. Folia et Radix.) Succory or Cichory. This is another bitter vegetable, which, though highly prized in other countries, is thought little of in this. It has no place in our Pharmacopœias, and certainly there is no occasion for it. On the Continent, the expressed juice of the leaves and decoctions of the roots, are employed in cachectic, hydropic, and icterical cases. Foreigners are also fond of prescribing an extract and syrup prepared from this plant.

CINCHONA officinalis. (See p. 53 of this Volume.) Peruvian Bark. Of all the medicines of this class, the cinchona is that which is most extensively used; and certainly it is preferable to most

most of the other articles for the purposes of counteracting febrile affection, and of restoring tone and vigour in the multiform cases of general and particular weaknesses which are daily met with. Hence its employment in intermittent and remittent fevers; in the early stages of the jail and petechial fevers; in the advanced and sinking stages of all continued fevers; in malignant small pox; malignant angina and the plague; (see Antiseptics) in all convalescencies; in certain convulsive affections connected with too great sensibility and irritability of the nervous system; such as hysteria, chorea, epilepsy, whooping-cough; (*Murray de tempore Cort. Per. in Tussi Convulsivâ exhibendi*, 1776, and reprinted in his *Opuscula*, Vol. I.) in certain disorders depending upon an impaired condition of the organs of digestion and secretion, and accompanied with a languid or feeble action of the sanguiferous system; such as chlorosis, diarrhœa, fluor albus, gleet; in diminished actions of the absorbents and lymphatic glands, such as dropsy, venous hæmorrhage, scrophula; in cachectic, phthysical and scorbutic affections; in all cases of foul and chronic ulcers; in malignant erysipelas; and in gangrene. (See Antiseptics.)

Having noticed the principal circumstances to be attended to in the administration of this drug

in Intermittent Fevers at pages 215, 216, 217, of the *Thesaur. Med.* it will be unnecessary for us to discuss that topic here. We shall only remark that, in this climate, the Peruvian bark will not always answer for the cure of agues, and that where it disagrees, chamomile and other bitters, joined with myrrh and aromatics (see p. 98 of this volume) may be advantageously used in its stead. But it more frequently disagrees in Remittent Fevers; because they are generally accompanied with a bilious or slimy condition of the intestinal canal, and on that account require the repeated employment of antimonial, mercurial, and other evacuating medicines. Hence the lighter tonics, such as the angustura and colombo, succeed better in the majority of such cases.

In regard to its exhibition in Continued Fevers, much mischief is often occasioned by prescribing it too soon. *Morton* erred in this particular; and the remark which is contained in the posthumous work of a late classical and philosophical physician (*Heberden Commentarii de Morborum Historia et Curatione*, p. 155) will, we are of opinion, be of disservice rather than of use to the practitioners of physic, as it is not accompanied with any restriction as to time (whether the fever be at the onset, the acme, or the decline) and other qualifying circumstances. We have been witness, in several instances,

instances, to a very great aggravation of symptoms, in consequence of a free exhibition of the cinchona in the early period of fevers of a continued type;—of its exhibition at a time when the circulating system has been in a state of too much action, when the skin has been parched, the tongue foul and dry, and the urine high-coloured and without sediment. Under such circumstances of Continued Fever, we have known the Peruvian bark, in a much less dose than that mentioned by Dr. *Heberden*, to produce a very injurious effect. In fact, it should always be kept back in these fevers (except where the marks of a septic condition appear at the beginning) until the inordinate arterial movements and increased heat shall have been considerably abated, and the stomach and intestinal canal duly freed from their impurities. This is a business of some days; and when we have proceeded so far, camphorated and opiate medicines will often answer better, even at this period, than the Peruvian drug: But afterwards, when the febrile action is nearly spent, when the skin is observed to be soft, the tongue moist, and in part cleared of its morbid covering; then the cinchona may be thrown in with the best effect.

These observations relative to the precipitate employment of the Peruvian bark in Continued

Fevers, are meant to apply to such of those fevers as are not early accompanied with marks of great malignancy ; such as extreme debility and fluttering of the pulse, proclivity to fainting, coldness of the extremities, hæmorrhages, petechial eruptions or gangrenous ulceration of the throat : For, in all such cases of continued fever, the cinchona should be largely administered, joined with the mineral acids (see Antiseptics) in every period of the disease. In like manner, it will often be necessary to employ it early in certain eruptive fevers of a continued type, such as the malignant erysipelas, malignant small pox, malignant scarlatina and the plague. In these cases not only acids, but Port Wine also, are given in conjunction with the bark. (See Antiseptics.)

In Intermittent Fevers the cinchona is best administered in substance, alone, or joined with aromatics, with ammoniacal salts, with aloetics, with rhubarb, &c. (*Thesaur. Med.* p. 171, 172—219—221.) Moreover in these cases it is sometimes joined with astringents, (*Ibid.* p. 191—222) and sometimes with opium.—The Decoction alone is not powerful enough for the cure of intermittents. When given therefore in this form it is necessary to add to each dose of the decoction not only some of the tincture but a quantity of the extract or powder also.—To children labouring

labouring under agues, the extract is less nauseating than the powder, and may be given mixed up with sugar and milk and water. (*Heberden Commentarii de Morb. Hist.* p. 160.) In Continued Fevers it is given in decoction, joined with camphor, with serpentaria, with acids, with opiates, (*Ibid.* p. 173) and accompanied with the use of Wine; for where the bark agrees in these fevers, wine and especially claret or port wine, agree also, and greatly promote its operation, (p. 176—239.)—In cases of chronic debility, it is combined with some of the warmer stomachics, such as ginger and cascarilla, (*Ibid.* p. 221—235), or with bitters and chalybeates. (*Ibid.* p. 233—236.)—In certain convulsive affections, such as chorea and epilepsy, magnesia, prepared kali, or prepared natron, together with camphor or opium, are advantageously mixed with it; and in cases of hysteria, the water or spirit of ammonia, valerian, &c. In dropical cases it is joined with squills, digitalis, and other diuretics.—Where the bark cannot be administered by the mouth it may be thrown into the intestinal canal, joined with opium, clysterwise. (*Thesaur. Med.* p. 258.) It is said, too, that, in the instance of children who have refused to take this drug by the mouth, the powder moistened with the decoction and made into a cataplasm, has been applied to the region of the stomach with evident good effect, in intermittent

mittent fevers; but putting the feet of children in these cases in a bath made of the decoction does no good. (*Heberden Commentarii de Morb. Hist. et Curatione*, p. 160.) Better success may be expected from rubbing, after the manner lately recommended by *Brera* and other Italian physicians, the extract of the bark (previously rendered sufficiently moist by trituration with gastric juice, saliva or oil) upon the thighs or other parts of the body. In this mode of application a considerable absorption takes place, and a very powerful effect is often produced upon the system. (*Duncan's Annals*, and *Marabelli Apparatus Medicam.* 1801.)—Dose of the bark in powder from half a drachm to two drachms, mixed in any proper vehicle, or made into an electuary.—The *Decoctum Cinchonæ*, Ph. Lond. (*Decoctum Corticis Peruviani*) is made by boiling for ten minutes, in a covered vessel, one ounce of the pulverized bark in one pint and three ounces of water. Dose from one to three ounces; generally joined with a small quantity of the tincture, and sometimes strengthened by the addition of the powder or extract also. The *Decoctum Corticis Peruviani sive Cinchonæ*, Ph. Ed. is made by boiling for the same length of time one ounce of the bark in a pound and a half of water; consequently it is not quite so strong as the London decoction. Dose from one to four ounces.—In both

both cases the decoction is to be strained while hot; as it is liable to throw down a sediment in cooling, and consequently to lose something of its strength.—If an Infusion is preferred, it may be made by triturating for half an hour the fine powder, alone, or with a fifth or sixth part of calcined magnesia, with rather more than half a pint of cold water; the water being added gradually.—After all the water has been added, the whole should be well shaken together, and then strained. Of such an Infusion from two to three ounces may be given for a dose, with or without spirituous and aromatic additions.—In the Lond. Ph. there are two extracts prepared from this drug, viz. the *Extractum Cinchonæ*, which might have been termed *Extractum cinchonæ per aquam*, and which is obtained by evaporating the water in which the bark has been boiled to the state of either a soft (*extractum molle*) or hard extract (*extractum durum*); the former being intended for pills, the latter for any other purposes. Dose from ten grains to a scruple; made into pills, or mixed up with aromatic liquors, or with the decoction.—It is a preparation of little efficacy, all the aromatic properties of the bark being dissipated in the long-continued boiling: And the *Extractum Cinchonæ cum resina*, which might have been termed *Extractum Cinchonæ per spiritum vinosum*, and which is prepared by digesting

digesting the bark first in rectified spirit of wine, then pouring off the tincture, and boiling the residuum in water. The tincture and decoction are strained separately; the one is distilled and the other evaporated; after which the two residuums (*viz.* the resin and the extract) are mixed together and evaporated to a consistence fit for being made into pills. The *Extractum Corticis Peruviani*, Ph. Ed. is made in the same way. Dose of either from five to fifteen grains.—This spirituous extract is certainly preferable to the aqueous extract; but neither the one nor the other can be relied upon in intermittents and other disorders, which require for their removal the utmost effect of the bark.—In the instance of children, whom it is sometimes impossible to compel to swallow the bark, these extracts may be conveyed into the body by friction, after the Italian method before-mentioned. The *Tinctura Cinchonæ sive Corticis Peruviani*, Ph. Lond. is made by digesting for eight days six ounces of the bark in two pints of proof spirit. Dose two or three drachms. The ¶ *Tinctura Cinchonæ Ammoniata*, Ph. Lond. is made by digesting for ten days four ounces of the bark in two pints of compound spirit of ammonia. Dose, from thirty to sixty drops. It is a bad preparation, it being impossible to give an active dose of the bark in this manner. The ammoniacal menstruum previously impregnated

impregnated with essential oils, extracts but little even of the aromatic properties of the bark. If a combination of the volatile alkali with the Peruvian drug be desired, it should be made by adding a proper proportion of the ammonia to the decoction, or to the common spirituous tincture of cinchona.—Infinitely preferable to the preceding ammoniated preparation, is the *Tinctura Cinchonæ composita*, Ph. Lond. which is made by digesting for a fortnight two ounces of the bark, one ounce and a half of the dried rind of Seville oranges, three drachms of Virginian snake-root, one drachm of saffron, and two scruples of cochineal, in twenty ounces of proof spirit. Dose one, two, or three drachms. This is *Huxham's* celebrated tincture of Peruvian bark. (See his Essay on Fevers, p. 122.) This “I have used (says he) for many years with success, not only in intermitting and slow nervous fevers; but also in the putrid, pestilential, and petechial, especially in the decline: and that too many times, though the remissions have been very obscure, and yet with a very good effect. But if the patient is costive, or hath a tense and tumid abdomen, I always premise a dose of rhubarb, manna, or the like.”—He gave it in any appropriate draught, or diluted wine, with ten, fifteen, or twenty drops of elixir of vitriol.—The colouring materials, the saffron and cochineal, seem to be superfluous ingredients
in

in this tincture.—In the Ed. Ph. there is but one *Tinctura Corticis Peruviani*, which is made by digesting for ten days four ounces of the bark in two pounds and a half of proof spirit. Dose one, two, or three drachms.

What we have said above concerning the uses, preparations, and doses of the cinchona officinalis, or common Peruvian bark, will apply to most of the other species and varieties of this genus; such as the red-bark (*cinchona rubra*) the Jamaica or Caribbean bark (*cinchona Caribbæa*. Wright in Phil. Transf. Vol. LXVII.) the St. Lucia bark (*cinchona floribunda*) the yellow-bark (*cinchona lutea* feu *flava*) &c. All these, though they vary in their degree of activity, coincide in their general effects, and may therefore be indifferently used, one for another. In this country, however, the *red* and *yellow* seem to be generally preferred. (*Ruiz* on the different species of cinchona (in the German) 1794. *Lambert's* Description of the Genus Cinchona, 4to. 1797.)

The high price of this drug, and the difficulty of procuring it in some countries, have given occasion to the succedaneous employment of other barks and vegetable substances (in which the bitter and astringent principles are united) in its stead; such as the *æsculus hippocastanum*, the *quercus*
robur,

robur, the *geum urbanum*, the *salix alba*, the *swietenia febrifuga*, &c. for observations on all which, the reader is referred to those articles severally.—Much valuable information, relative to the use of the Peruvian Bark in Intermittent, Remittent, and Continued Fevers, may be derived from the writings of *Sydenham*, *Morton*, *Torti*, *Huxham*, *Werlhof*, *Cleghorn*, *Cullen*, *Pringle*, *Monro*, *Baker*, *Heberden*, *Lind*, *Clarke*, *Fordyce*, *Blane*. Among the separate treatises on this drug the following may be referred to as the most esteemed: *de Berger de Chinchina ab iniquis judiciis vindicata*, 1711, and reprinted in Vol. V. of *Haller's Dissertationes Medico-Practicæ*. *Hoffman de recto Corticis Chinæ usu in febribus*, 1728, and reprinted in Vol. VI. of his works. *Buchwald's methodus curandi febres intermittentes per Cort. Cinchonæ*, 1751. *Linnaeus de Cortice Peruviano*, 1758, and reprinted in Vol. IX. of the *Amœnitates Academicæ*. *Triller de Cort. Per. usu*, 1758, and reprinted in Vol. I. of his *Opuscula*. *Buckner de usu Cort. Per. cum Camphora remixti in febribus ex putredine ortis*, 1762. *Pulteney de Cinchona Officinali* Edinb. 1764, and reprinted in Vol. III. of *Smellie's Thesaur.* *Baldinger de Cort. Per. connubiis, et eum exhibendi modis*, 1769.—*Saunders* on the superior efficacy of the Red Peruvian Bark in the cure of Fevers, 1782. *Skeete* on the Quilled and Red Peruvian Bark, 1786.

Relpb

Relph on the Yellow Bark, 1794. *O'Ryan* on ditto, 1794. *Vaughan* on ditto, 1795. *Marabelli* de China lutea, 1796, and in his *Apparat. Med.* 1801.

CITRUS Aurantium. (See p. 44 of this Volume.) *Aurantium hispalense.* The Seville Orange. The outer rind of this fruit (*cortex exterior vel flavedo corticis*) abounds with a warm essential oil, which in conjunction with the bitter principle, also present in the rind, has an excellent stomachic effect; and is accordingly prescribed with great advantage in cases of indigestion, flatulency, gouty conditions, and convalescencies. It is an useful addition to the Peruvian bark in intermittents, and in many forms of chronic debility in which that drug is employed. In gouty affections of the stomach it is joined with magnesia and other absorbents. Of the dried rind, from fifteen grains to two scruples may be given for a dose. In infusion, two or three drachms may be used to half a pint of boiling water.—There is a *Conserva Aurantii* and a *Syrupus Aurantii* in both Pharmacopœias, made in the usual way. The first, *viz.* the conserve is given in doses of two or three drachms; the last is employed for flavouring draughts and juleps. The *Tinctura Aurantii Corticis*, Ph. Lond. is an elegant and useful preparation. It is made by digesting for three days three ounces of the fresh rind in two pints of proof spirit

spirit. Dose one or two drachms. Added to draughts of the camphorated mixture, or some of the distilled aromatic waters, and joined with absorbents, and opiates, or sometimes with aloetics and chalybeates, this tincture is of eminent service in those debilities of the stomach, and alimentary canal, which originate from hard drinking. Of the leaves notice will be taken under Antispasmodics.—What is here said of the Seville orange will apply to the small unripe Curaçao oranges.

CROTON *Cascarilla*. [Clutia Eleutheria.]

In the Tabular View of the Contents of this Class, the Cascarilla stands as a species of Croton; but from more recent and accurate botanical observations (See *Woodville's Medical Botany* Vol. IV. p. 2) it appears that it is the bark of the

CLUTIA *Eluteria*. Diœcia. Gynandria. Triloccæ. East and West-Indies. Arbor. (Cascarilla. Cortex.) Seaside Clutia. Cascarilla. This bark is a valuable aromatic bitter. Like the angustura bark it is prescribed very successfully in alvine fluxes (but in smaller doses, being more stimulant) and may be given in most cases where strengthening medicines are required. It is an useful adjunct to the cinchona in intermittent

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and other fevers, and in convalescencies; as it corrects the laxative effect which the Peruvian drug often has upon the bowels, and by its aromatic properties increases its tonic powers. It is also advantageously joined with chamomile and other bitters. Dose of the pulverized bark from ten to thirty grains.—The *Extractum Cascarille*, Ph. Lond. is prepared in the same manner as the resinous extract of Peruvian bark. Dose from ten to fifteen grains. The *Tinctura Cascarille*, Ph. Lond. is made by digesting for eight days four ounces of the bark in two pints of proof spirit. Dose one or two drachms. It is an elegant and active preparation.

COLOMBA. (Radix.) Columbo-root. The plant from which this excellent bitter drug is obtained has not yet been described by botanists. It is brought to Europe from Ceylon. This bitter mucilaginous root is frequently and successfully employed in debilities of the stomach and intestinal canal; in cholera; in bilious diarrhœas; and in bilious remittent fevers; in which last it agrees where the Peruvian bark will not. (*Pearson on Bilious Fevers*, 1799.) It is likewise serviceable in the nausea and vomiting which occur in pregnancy. In the last mentioned cases it is joined with orange-peel, with ginger, with peppermint or other aromatics; in cholera with aromatics and

and opiates ; in bilious diarrhœas and bilious fevers with neutral or alkaline salts. Dose of the pulverized root from fifteen grains to half a drachm. In infusion, two drachms to a pint of hot water. The *Tinctura Colombæ*, Ph. Lond. is made by digesting for eight days two ounces and a half of the root in two pints of proof spirit. The *Tinctura Colombæ*, Ph. Ed. is made by digesting for the same space of time two ounces of the root in two pounds of the spirit. Dose of either one or two drachms. *Percival* on the Colombo root in Vol. II. of his Medical and Experimental Essays ; and *Josse* in Vol. III. of the Histoire de la Société de Med. de Paris.

¶ *GENTIANA Centaurium*. [*Chironia Centaurium* of some botanists.] Pentandria. Digynia. Rotaceæ. Indigenous. (*Centaureum minus*. *Cacumina* seu *summitates florentes*.) Lesser Centaury. The flowering tops and other parts of this plant possess a remarkable degree of bitterness, and hence have been employed in all cases in which it is customary to use stomachic medicines. We conceive, however, that it is not at all preferable to wormwood, tansy, and other bitter vegetables of this class; and we therefore think it should be erased from the over-crowded list of the *materia medica*. Dose of the dried and pulverized tops, from fifteen grains to two

I 2 scruples.

scruples. In infusion two or three drachms to half a pint of hot water.

This and the following species of gentiana are ingredients in the Portland powder; once in the highest repute as a remedy against the gout, but latterly fallen into discredit in consequence of the censures passed upon it by *Werlhof*, *Cullen*, *Darwin*, and others. Doubtless the long-continued use of all bitters is prejudicial to the living body, and of some the deleterious operation is very conspicuous. Hence the paralytic, apoplectic, and hydroptic affections, which have supervened in the instance of gouty persons who have taken the Portland remedy for a great length of time, have, we think, with good reason been chiefly ascribed to this and the other bitter herbs of which it is composed. Dr. *Heberden*, however, in his elegant work (entitled *Commentarii de Morb. Hist. et Curatione*, p. 49) is of opinion that the aforesaid fatal disorders, with which gouty persons have been seized while under a course of this remedy, are not imputable to it, but to the disease itself; whose natural tendency in constitutions advanced in years, and that have long endured its attacks, is to terminate in such manner. He believes it to have had the effect, in many instances, of mitigating the fits when present, and of rendering their returns less frequent. The only objections he

he fees against the Portland powder are, that it is too compound [the ingredients are the roots of birth-wort (*aristolochia*) and gentian, the tops and leaves of germander (*chamædrys*) ground-pine (*chamæpitys*) and lesser centaury—equal quantities by weight of each] and that it has generally been given in doses so large as to disagree with the stomach, and thus from its bulk and bad taste to have been loathed by the patients. Instead, therefore, of rejecting it altogether, he recommends the correcting of these inconveniencies, by reducing the number of ingredients, and more carefully apportioning the dose. Convinced, however, as we are, that injurious effects are produced upon the system by the habitual use of all bitters, we would not advise the Portland powder to be resorted to as an antipodagric, even under the improvements in regard to composition and administration, proposed by Dr. *Heberden*. Rather would we recommend in such cases the frequent or continued employment of *canella alba*, ginger, (see *Amomum* under Stimulants) and other aromatics; *occasionally* interposing tansy, zedoary, serpentaria, and other bitters; for very different is the having recourse to the last-mentioned remedies *at times*, (such as on the approach of gouty symptoms, and for a few days after a paroxysm) from the *constant* exhibition of them. *Wedel de Centaurio minori*, 1713.

GENTIANA lutea. Class and order as above. The Alps, Apennines and Pyrenees. (Radix.) Yellow Gentian. The root of this beautiful plant is a valuable bitter, very successfully and very generally employed as a stomachic and strengthening medicine. It is particularly useful in various chronic affections connected with debility, such as dyspepsia, diarrhœa, hysteria, chlorosis, dropsy. It has also been given with good effect in intermittent and remittent fevers, joined with the Peruvian bark; and in convalescencies from all fevers. In these and other cases it is combined with aromatics and chalybeates; sometimes with acids; at other times with alkaline salts, especially in dyspeptic and chlorotic affections, as also in certain disorders of the bowels; with absorbents and aromatics in cases of gout—but with the precautions mentioned on the subject of the Portland powder, under the preceding species. In dropsies it is combined with the squill, neutral salts and other diuretics.—The *Infusum Gentianæ compositum*, Ph. Lond. (formerly *Infusum Amarum simplex*) is made by macerating for one hour in twelve ounces of boiling water one drachm of gentian-root, a drachm and a half of the dried outer rind of the Seville orange, and half an ounce of the fresh outer rind of the lemon. Dose from half an ounce to an ounce and a half. A larger quantity is apt to excite nausea. In our
own

own practice we have always found it to answer better when administered in combination with some of the aromatic distilled waters, and in doses not exceeding an ounce, than when given alone. The camphor mixture is an useful addition to it in many cases. The *Infusum Amarum*, Ph. Ed. is made by first steeping half an ounce of gentian root, one drachm of dried Seville orange-peel, and half a drachm of coriander seeds in four ounces of proof spirit, for three hours; afterwards adding a pound of water and macerating without heat for the space of a night. In consequence of the previous addition of the spirit of wine, and the greater length of time given for the maceration, this infusion is stronger and more aromatic than that of the London college. Dose from half an ounce to one ounce.—The *Tinctura Gentianæ composita*, Ph. Lond. (formerly called *Tinctura amara*) is made by digesting for eight days two ounces of gentian root, one ounce of the dried outer rind of Seville oranges, and half an ounce of the lesser cardamom seeds in two pints of proof spirit. Dose from one to three drachms.—The *Tinctura amara*, Ph. Ed. (vulgo Elixir Stomachicum) is made by macerating for the space of four days two ounces of gentian root, one ounce of dried Seville orange-peel, half an ounce of canella alba, and half a drachm of cochineal in two pounds and a half of proof spirit. Dose

the same as of the preceding tincture.—The *Vinum amarum* sive *Gentianæ compositum*, Ph. Ed. is a combination of the Peruvian bark with this drug, and might, perhaps, more aptly have been termed *Vinum cinchonæ cum gentiana*. But when this combination is desired, we conceive it to be much better to add extemporaneously to the decoction of the Peruvian bark a proper quantity of the common tincture of gentian, or to the common infusion of gentian a proper quantity of the tincture of Peruvian bark.—This *Vinum amarum* sive *Gentianæ compositum* above-mentioned, and which we consider as a superfluous preparation, consists of gentian root half an ounce, Peruvian bark one ounce, dried Seville orange-peel two drachms, canella alba one drachm. These ingredients are first steeped in four ounces of proof spirit for twenty-four hours; after which two pounds and a half of Spanish white wine are added, and the maceration is continued for three days. Dose from two drachms to half an ounce.—The *Extractum Gentianæ* of both Pharmacopœias is made by evaporating the saturated and strained decoction of the root to a consistence fit for being made into pills; under which form it is frequently prescribed in all those cases in which the Infusion and Tincture are employed. Dose of this extract from ten grains to half a drachm. It is seldom given alone, but generally in

in combination with aromatic and aloetic powders, with myrrh, vitriolated iron, &c. *Hartman Historia Gentianæ naturalis et medica*, 1777.

¶ *GEUM urbanum*. Icosandria. Polygynia. Senticosæ. Indigenous. (Caryophyllata. Radix.) Herb Bennet. This bitter astringent root has, of late years, been employed in the northern parts of Europe as a substitute for the Peruvian bark, in the cure of intermittents, diarrhœas, &c. That it possesses some medicinal agency in these cases, is unquestionably true; but that it is equally efficacious, or nearly so, with the Peruvian drug for these and other purposes, we can by no means admit. It is even inferior in febrifuge virtues to some species of willow. Indeed, in this country which is so well supplied, through its extensive commerce, with the cinchona, angustura, cascarilla, and other more powerful foreign tonics, it is not likely that this species of geum or the geum *rivale* (for both have been recommended) will be held in much estimation. Dose in substance from half a drachm to a drachm. In decoction, an ounce to a pint of water. *Buckhave Observationes circa radicem Gei urbani*, 1781.

¶ *INULA Helenium*. Syngenesia. Polygamia superflua. Compositæ discoideæ. Indigenous. (Enula campana. Helenium. Radix.) Elecampane.

pane. The root of this plant is among the least efficacious of bitters and aromatics; and should be erased from the list of modern Pharmacopœias.

KÆMPHERIA *rotunda*. Monandria. Monogynia. Scitamineæ. East-Indies. (Zedoaria. Radix.) Zedoary. This root is a good stomachic frequently prescribed in cases of flatulency, gout, diarrhœa, &c. Dose in substance from fifteen grains to half a drachm. In infusion, half an ounce to a pint of water, previously macerating the powder in a small quantity of proof spirit. It is an ingredient in the *Confectio aromatica*, Ph. Lond.

LICHEN *Islandicus*. (See p. 13 of this Volume.) Iceland Liverwort. An experience of several years has satisfied us that the character given of this bitter mucilaginous vegetable at p. 251 of the *Thesaur. Med.* is not over-rated. We therefore refer to that work for an account of its medicinal properties. Dose of the pulverized herb from one to two scruples. The decoction is an useful preparation; but when made of a tolerable strength it becomes somewhat gelatinous. (One drachm to eight ounces of water will not make it too thick.) Hence the pulverized herb is prescribed by some, or is added to each dose of the decoction

tion at the time of taking it. If in this way of administering it, the bowels should be rendered lax the addition of a few drops of tincture of opium will be proper. The Decoction may be mixed with equal proportions of the decoction of Peruvian bark, or with the unacidulated infusion of roses, according to circumstances. The Lichen *pyxidatus*, and other species of this genus, coincide in medicinal powers with the above. *Cramer de Lichene Islandico*, 1780. *Memoires sur l'utilité des Lichens dans la medecine, &c. par Messrs. Hoffman, Amoureux, et Willemet*, 1788. *Murray Appar. Med. Vol. V.*

¶ *MARRUBIUM vulgare*. Didynamia. Gymnospermia. Verticillatæ. Indigenous. (*Marrubium album*. Herba.) White Horehound. This is a nauseous bitter, in no respect preferable to chamomile, wormwood, buckbean, or gentian; and may therefore well be expunged from the long list of tonic medicines.

MENYANTHES trifoliata. Pentandria. Monogynia. Preciæ. Indigenous. (*Trifolium paludosum*. *Trifolium fibrinum*. Herba.) Buckbean or Marsh Trefoil. This is a good bitter. The dried herb may be employed in infusion in the same cases as chamomile, wormwood, and gentian. It is thought to be particularly useful in
certain

certain cutaneous diseases, in arthritic affections, and in remittent fevers. (*Thesaur. Med.* 242, 243.) The proportions for making the infusion should be half an ounce of the dried herb to a pint of water.

MYRRHA. (See Vol. I. p. 147.) Myrrh. This gum resin is employed as a tonic with great advantage in most cases of debility, and especially in such as are accompanied with visceral affection, such as amenorrhœa, pulmonary consumption, &c. Joined with bitters and alkaline salts it has often removed remittent and intermittent fevers, after the Peruvian bark has failed. (See p. 98 of this Volume.) Moreover, it is useful in all convalescencies, combined with the cinchona and chalybeates. In cases of hysteria, chlorosis, and amenorrhœa, aloes, galbanum, vitriolated iron, &c. are added to it; and in pulmonary and hæctical cases, it is joined with solutions of kali, neutralized with the vegetable acid; or with un-neutralized solutions of the alkaline salt. In the last-mentioned disorders, a mixture of myrrh, prepared kali, and vitriolated iron, has long been in use; but in our own practice we have found a solution of the gum resin in pure water, with the addition of a due proportion of vitriolated zinc and tincture of opium or tincture of digitalis, to have a much better effect, and to be less disagreeable

able to the palate. Besides, the chalybeated myrrh mixture gradually undergoes a chemical decomposition, which renders its strength and operation uncertain. (*Thesaur. Med.* p. 239, 240.) The various preparations of myrrh, with their doses, have been already noticed in Vol. I. at pages 150—287—288—290 and 294, to which the reader is accordingly referred. In common cases of debility, this gum resin is given in doses from fifteen grains to a scruple; but where the chief reliance is placed upon it in intermittents it is prescribed in larger quantities, viz. two scruples or a drachm, at a time. *Cartbeuser de eximia Myrrhæ virtute medica*, 1746.

¶ *PANAX quinquefolium*. [*Panax quinquefolia*.] Polygamia. Diœcia. Chinese Tartary, and North America. (*Ginseng. Radix.*) Ginseng. A feeble stomachic undeservedly prized by the Chinese and deservedly slighted by European physicians. It is a superfluous article of the *materia medica*.

POLYGALA amara. Diadelphia. Oständria. Lomentaceæ. Mountainous parts of France, Piedmont, Switzerland, &c. (*Herba et Radix.*) Bitter Polygala. Bitter Milkwort. This stomachic vegetable, though suited to general cases of debility, has been chiefly prescribed in consumptive disorders.

disorders. Dose of the pulverized herb or root from a scruple to a drachm. In decoction, an ounce of the fresh herb, or roots, to a pint and a half of water, boiled down to a pint. Two ounces of this decoction may be taken at a time. An infusion of the dried herb is a better preparation. It may be given alone or mixed with an equal quantity of the decoction of Peruvian bark.

QUASSIA *amara*. Decandria. Monogynia. Gruinales. Surinam. (Lignum. Cortex. Radix.) Bitter Quassia. This holds a principal place among the simple bitters; and is prescribed with good effect in various disorders of the stomach and intestinal canal, whether with or without fever, as well as in hysteria, periodic headach, and nervous irritability. It is particularly useful in the bilious complaints of the hot climates. (*Thesaur. Med.* p. 244, 245.) It is best administered in infusion; in the proportion of two drachms of the grated wood, bark, or root, to a pint of hot water. One ounce of such an infusion may be given for a dose alone or combined in some cases with alkaline salts (*Gibson on the Effects of Quassia and Natron in Bilious Diseases*, 1799) in other cases with vitriolated zinc. (*Lettson in Memoirs of the Med. Society*, Vol. I.) In hysterical affections it may be joined with camphor or valerian; in gouty cases with absorbents and aromatics, particularly ginger.

ginger. In intermittents, it is combined with the Peruvian bark, and other astringents. For rendering it less unpalatable liquorice and spirit of cinnamon answer best.—Of late years this drug has been very generally employed in this country in public and private brewing, as a substitute for hops to the great prejudice of the people's health. For although as a simple bitter, quassy is preferable to the hop for most medicinal purposes, yet for œconomical uses, and particularly for brewing, the hop is greatly superior to the Surinam wood. Mere bitterness is not the only quality which is wanted in brewing, nor the only one which the hop possesses; it is also astringent and aromatic, to a considerable degree—properties which greatly increase its antizymic powers, and which are altogether wanting in the quassy. Hence malt liquor bittered with this last vegetable is not only less depurated, less clear; but is at the same time apt to run into the acetous fermentation, and to lose all its mild and nourishing qualities. It spoils in half the time that hopped malt liquor does. This circumstance has contributed in no small degree to those bowel complaints which have prevailed so much during the last three or four years. *Linnaeus* de Ligno Quassiae, 1763, and reprinted in Vol. VI. of the *Amœnitates Academicæ*. *Severi* Commentarius in quo medicatae Quassiae vires expenduntur, 1776.

QUASSIA

QUASSIA Simarouba. Class and order as above. Cayenne, Guiana, &c. Arbor. (Simarouba. Simaruba. Cortex.) Simarouba. The bark of this tree, which is bitter without being astringent, has been successfully employed in diarrhœas, and the advanced stage of dysentery. (*Jussieu, Degner, Pringle, Zimmerman, Monro, Wright.*) It is best given in the form of a decoction, in the proportion of two or three drachms to a pint of water. Some prefer a weaker decoction. (*Thesaur. Med.* p. 246.) Large doses excite vomiting. In some cases, opium; in others cascarilla is advantageously joined with it. *Jussieu* in the Memoirs of the French Academy, 1727, and in a Latin dissertation with the title, *An in fluxibus alvi inveteratis Simarouba?* 1730.

QUERCUS Robur. (See p. 82 of this Volume.) The Common Oak. As we have already noticed under Astringents, some practitioners have proposed the employment of this bark, combined with bitters and aromatics, for the cure of agues and various diseases of debility, in place of the cinchona; but where the Peruvian drug can be procured, it should always be preferred. Dose of the pulverized bark from fifteen grains to half a drachm.

SALIX alba. Dicœcia. Diandria. Amentaceæ.
Arbor.

Arbor. Indigenous. (Cortex.) The White Willow. Long experience has shown that this bitter-astringent bark is capable of supplying the place of the cinchona, in the cure of intermittents and remittents, in cases of convalescency, in debilities of the stomach and intestinal canal, in cachectic and dropical cases, &c. In pulmonary hæmorrhage and in phthifical and hectic disorders, it often agrees better than the Peruvian bark. Of its use in the last-mentioned cases, *Coopmans* in his *Oratio de Medicamentis indigenis* (Vide ejus *Opusculorum Physico-Med.* Tom. I.) says “*omnibus quæ aut Asia tulit, aut Africa, aut America, medicaminibus longe præstat: hujus [nempe Salicis] enim cortice non modo recidivas Hæmoptoës, sed et imminentem Phthisin sæpius sanatam vidimus.*” Certainly if there be any European vegetable capable of answering all the medical purposes of the Peruvian bark, it is this. Of the pulverized willow from half a drachm to a drachm may be given for a dose; but it is best prescribed in decoction, in the proportion of an ounce and a half or two ounces to a pint and a half of water boiled down to a pint. It is variously combined with other auxiliaries, in the same manner as the cinchona. *Stone* in Vol. LIII. of the *Phil. Trans.* 1763. *Gunz* de *Cortice Salicis Cortici Peruviano substituendo*, 1772. *James* on the efficacy of the Willow bark in Intermittents, Vol. II. K 1793.

1793. *White's* Observations on the Willow bark,
1798.

SALIX fragilis. The fragile willow. Class and order as above. This and some other species of the willow possess the same medicinal virtues as the *salix alba*; what has been said of that will therefore apply to the others.

SWIETENIA febrifuga. Decandria. Monogynia. Trihilatæ. Arbor. East-Indies. (Cortex.) Febrifuge Mahogany. The bark of this species of *swietenia* is said to be a good substitute for the Peruvian bark. Dose half a drachm. In decoction six drachms to a pint of water. In some parts of the East where the last-mentioned drug is not procurable, it may be useful; but it is not probable that it will be in request or estimation here. *Roxburgh's* Plants of the coast of Coromandel, 1795. To the bark of the common Mahogany (*Swietenia Mahogani*) similar medicinal powers have been attributed. *Murray's* Apparatus Med. Vol. VI. and Medical Facts and Observations, Vol. VI. *Duncan* de *Swietenia Soymida*, 1794.

TANACETUM vulgare. Syngenesia. Polygamia—Superflua. Compositæ. Discoideæ. Indigenous. (Herba et Flores.) Tansey. What has been said of wormwood and buckbean, will
apply

apply to this bitter vegetable. It is commonly given in infusion. *Thesaur. Med.* p. 243.

VINUM rubrum Portugallicum. Red Port Wine. Properly managed, Red Port is an excellent strengthening medicine in intermittent, low and malignant fevers (*Huxham, Pringle, Cullen, Monro, Blane, Trotter, Smyth, Fordyce*. See Antiseptics) in convalescencies from all fevers; in cachexia, leucorrhœa, diabetes; in certain convulsive affections such as chorea, tetanus, hydrophobia; and generally in those cases in which the Peruvian bark is required. The quantity to be allowed must be regulated by the age and constitution of the patient, and the nature of the disease. In low and malignant fevers and in tetanus, several pints have been given in the course of twenty-four hours; but in ordinary cases of debility, a few glasses (alone or diluted with water) within that space of time will suffice.—Where Red Port disagrees, Sherry or Madeira (lowered with water) may be used in its stead.—Some prefer Claret or Rhenish. (See Stimulants.) *Buckner de Vino, ut medicina*, 1756.—In small quantities Brandy (*Spiritus vini gallicus*) or common Malt-Spirits (*Spiritus Frumenti*) diluted with

water, produce the same tonic effects (see Vol. I. p. 105) as wine; and in certain debilities of the stomach and intestinal canal, and especially in gouty and hysterical cases, they answer better than wine. *Linnaeus* de Spiritu Frumenti, 1764, and reprinted in Vol. VII. of the *Amœnitates Academicæ*.

ACIDUM nitricum. *Acidum nitrosum*, Ph. Lond. et Ed. Spiritus Nitri vulgaris. Nitric Acid. Glauber's Spirit of Nitre. Common Spirits of Nitre. Obtained according to the formula of the Lond. Coll. by mixing sixty ounces (by weight) of purified nitre with twenty-nine ounces (by weight) of vitriolic acid, and distilling: According to the Edinb. Formula by putting two pounds of purified nitre coarsely pulverized, into a glass retort, pouring upon it one pound of vitriolic acid, and distilling in a sand-bath, gradually increasing the fire, until the iron pot is of a dull red heat. In this process the vitriolic acid seizes the alkaline basis of the nitre, and disengages its acid which passes over into the receiver. The residuum at the bottom of the retort is vitriolated kali. The *nitric* acid thus obtained is not quite pure. Some vitriolic acid is forced over along with it, by the degree of heat here specified; it should therefore be redistilled, with a gentler heat, over a fresh quantity

tity of nitre. When duly prepared it is colourless, and on exposure to the air exhales a white vapour; being thus distinguished from what is properly called the *nitrous* acid; which is of a yellowish-red colour and emits red fumes. These striking differences between the acid in these two states, are owing to the greater and less proportion of oxygen combined with its azotic basis; and which (*viz.* the oxygen) is so much greater in the nitric than in the nitrous acid.

The nitric acid, in doses of thirty or forty drops, diluted with water, has an evident tonic effect, and promises to be of use in various cases of debility, whether with or without fever; such as typhus [see Antiseptics] dropsey, jaundice, &c. But within the last four or five years it has been brought forward as a remedy against the venereal disease; and in that point of view has given rise to much controversy among medical practitioners. In this disease it has been given in a much larger quantity than that above-stated, as we shall afterwards mention.

Mr. Scott, a Surgeon in the East-India service, first announced the antisyphilitic powers of this acid in the *Bombay Courier*; and afterwards sent an account of his successful employment of it to *Dr. Beddoes*; at whose recommendation trials were

soon made by various physicians and surgeons, and the result thereof communicated to the public by the last-mentioned Author in his Reports concerning the effects of Nitrous Acid, 1795, in his Collection of Testimonies respecting the Treatment of the Venereal Disease, 1799, in his Contributions to Medical and Physical Knowledge, 1799, and in his Communications respecting the external and internal use of Nitrous Acid, 1800. From these cases as well as from others published by Dr. *Rollo*, (in his Treatise on Diabetes, 1798) it would appear that this acid has greatly mitigated the venereal symptoms in many cases, and has removed them in others; while in some it has failed. It is given to syphilitic patients in doses of two or three drachms daily, diluted with as many pints of water and sweetened with syrup. This treatment is continued for several weeks if necessary; and the whole quantity of acid thus taken has sometimes amounted to twelve, fourteen or sixteen ounces. During its use the urinary secretion is increased; sometimes the gums and salivary glands are affected; and generally the appetite and spirits are improved. Pain of the stomach or disordered bowels show that the acid is over dosed.

It would have been a happy event for mankind, as many and serious evils arise from the abuse of
mercury,

mercury, if this new remedy had stood the test of more extensive trials; but unfortunately it has not succeeded in other hands; as appears from the facts stated by *Mr. Blair* (*Essays on the Venereal Disease*, Part. I. and II. 1799, 1800) and by *Mr. Pearson* Surgeon to the Lock Hospital (*Observations on the Effects of various articles of the materia medica in the cure of the Lues Venerea*, 1800.) These gentlemen assert that in the majority of cases of confirmed syphilis the nitric acid affords but little relief; and that in those instances in which it has caused the symptoms to disappear for a time, they have afterwards returned; thus producing only a temporary and fallacious cure. It cannot, therefore, they contend, supersede the use of mercury in the venereal disease; although in some instances it may be advantageously given in conjunction with that metal; or after a mercurial course, for the removal of weakness and certain painful affections of which such patients often complain. Temperature has a surprising influence on chemical agents of this nature; so that it is not inconceivable that in the warm climates of the East and West-Indies, the nitric acid may suppress or remove venereal affections which resist it here. This acid has been employed externally in the form of a bath and wash, as well as internally in these and other cases. What has been above said

concerning the use of the Nitric Acid in the venereal disease will equally apply to the muriatic acid, the oxymuriatic acid, the oxymuriate of potash, and other similar substances abounding in oxygen, which have lately been proposed as anti-syphilitics.—The *acidum nitrosum dilutum*, Ph. Lond. et Ed. is prepared by mixing together equal quantities by weight of the aforesaid acidum nitrosum and water. A drachm or two may be given for a dose.

(2) *From the Mineral Kingdom.*

ACIDUM vitriolicum. *Acidum sulphuricum.*
 (Acidum vitrioli. Acidum sulphuris. Spiritus vitrioli. Spiritus sulphuris. Oleum vitrioli.)
 Vitriolic Acid. Sulphuric Acid. Oil of Vitriol.
 Obtained either by distilling vitriolated iron (green vitriol) in a strong heat, or by burning sulphur in vessels constructed for the purpose. This acid in its concentrated state is not used in medicine; but when duly diluted with water it is employed in various diseases. The *Acidum vitriolicum dilutum*, Ph. Lond. consists of vitriolic acid one part (by weight) and water eight parts (by weight.) Dose from fifteen to forty drops. The *Acidum vitriolicum dilutum*, Ph. Ed. (formerly Spiritus vitrioli tenuis) consists of vitriolic acid
 one

one part, water seven parts. It is therefore stronger than that of the Lond. College. Dose from ten to thirty drops. The diluted vitriolic acid is, in common with other acids, an useful medicine in low and malignant fevers; (see Antiseptics) in the colliquative sweats which occur in hectic fever, in menorrhagia, in large suppurations, and in convalescencies from most fevers. In these cases it is added to decoctions of cinchona bitter-infusions, infusion of roses; or the acid is previously combined with spices, as in the instance of the *Acidum vitrioli aromaticum*, Ph. Ed. formerly Elixir vitrioli acidum (see Antiseptics); or with alcohol, as in the *Spiritus Ætheris vitriolici*, Ph. Lond. et Ed. (see Refrigerants.) The doses of these preparations are mentioned under the classes referred to. Its use in gargles has been noticed under Antiseptics. In certain cutaneous diseases, the diluted vitriolic acid has been successfully administered in large doses such as sixty, eighty, or a hundred drops for a dose, mixed with considerable quantities of mucilaginous liquors, or with syrup and water. (*Smyth* in Vol. I. of Medical Communications.) The *Spiritus Ætheris vitriolici aromaticus*, Ph. Ed. (vulgo Elixir vitrioli dulce) is made by macerating cinnamon, cardamom, angelica and long pepper (in the same proportions and in the same manner as in the *tinctura aromatica*) with the *spiritus ætheris vitriolici*

vitriolici above-mentioned. Dose from twenty to sixty drops. It is an elegant and useful stomachic. Of the *Spiritus Ætheris vitriolici compositus*, Ph. Lond. notice will be taken under Antispasmodics.

ACIDUM muriaticum. Spiritus Salis. Muriatic Acid. Spirit of Salt. Applicable to the same cases as the vitriolic acid. Dose ten or twenty drops diluted with water. Used also in gargles. See Refrigerants and Antiseptics.

ARGENTUM nitratum. Nitrated Silver. See Antispasmodics.

ARGILLA vitriolata. Alumen. (See p. 87, 88, of this Volume.) Vitriolated Argill. Alum. This vitriolic salt has been frequently employed with good effect in intermittent fevers, joined with chamomile, gentian, myrrh, or Peruvian bark. (*Theaur. Med.* p. 234, 235.) Some practitioners have combined it with nutmeg in these cases (*Ibid.* p. 191) but for this purpose canella alba or ginger is a preferable aromatic. Five or ten grains of the alum may be given for a dose. After all, vitriolated zinc will generally answer better for the cure of agues than this salt. In the colica pictonum, alum has been administered in larger doses, viz. fifteen or twenty grains (*Percival's Essays*, Vol. II. and *Quarin Animadversiones*

versiones practicæ, p. 187) combined with mucilages and opium. *Mayerne* gave it as a strengthening medicine in dropfies. For other observations on the uses of this article, see Astringents; where are enumerated the various officinal preparations of which it is an ingredient.

ARSENICUM album. White Arsenic. This mineral substance is generally considered as a calx or oxyd of arsenic; but recent investigations have shown (*Fourcroy* *Connaissances Chimiques*, Tom. V.) that it is an acid; and as such is designated by the name of *arsenious acid*, to distinguish it from the *arsenic acid*; the proportion of oxygen being much greater in the latter than in the former. Thus in regard to oxygenation, there is the same difference between the arsenious and arsenic acid, as there is between the sulphureous and the sulphuric acid.

Like many other poisons, this has been exhibited in minute doses for the cure of various disorders; but particularly for the cure of intermittent and remittent fevers (*Friccius* *de virtute venenorum medicâ*, 1717. *Molitor* *de Febre continuâ malignâ et intermittente*, 1736. *Jacobi* in the *Acta Acad. Mogunt.* Vol. I. 1751, and *Fowler's* *Medical Reports on the Effects of Arsenic*, 1786) whooping-cough (*Ferriar's* *Medi-*
cal

cal Histories, Vol. III. and *Duncan's Annals*, Vol. II.) and hydrophobia (*Simmons' Medical Journal*, Vol. X.); not to mention its internal and external use in cancers (*Le Febure remede pour guerir le cancer*, 1775. *Rush's Medical Inquiries*, Vol. I. and *Justamond* on Cancerous disorders, 1780) and in elephantiasis, and some other cutaneous affections. In these cases it has been given either in its solid or concrete state made into pills (a very dangerous practice!); or in a state of solution, combined with the vegetable alkali, the only way in which it should ever be administered internally. This solution is prepared, according to *Jacobi*, by boiling ten grains of white arsenic, and two drachms of salt of tartar, in four ounces of water, until half the water is evaporated. When cold as much water as has been lost in the boiling is to be added, and a small quantity of spirit of wine. Dose to adults from fifteen to twenty drops three times a day; to children and young persons from five to ten drops, repeated in the same manner. *Fowler's* solution is made by boiling thirty-two grains of white arsenic reduced to a fine powder, and an equal quantity of prepared kali in four ounces of water; afterwards adding to the solution when cold, four ounces more of water and two drachms of spirit of lavender. This is called *the Mineral Solution*, and is given to children in doses

doses of two to six drops ; to adults in doses of ten, twelve, or fifteen drops three times a day.—Would it not be an improvement if the solution were prepared with a double proportion of alkali and water, increasing the number of drops given at a dose, accordingly?—It is scarcely necessary to remark that this as well as *Jacobi's* preparation, is a solution of arseniated potash or arseniated kali; the vegetable alkali uniting during the boiling with the arsenious acid and forming with it a neutral salt, when the quantity of alkali employed is sufficient for that purpose.

Various British practitioners, besides those above referred to, have not scrupled to prescribe this solution in intermittent fevers, and the other cases before-mentioned; asserting that under a cautious and limited exhibition, it has removed those disorders without producing any bad effects upon the constitution. Others on the contrary (*Monro, Baker, de Haen, Stoerck, Quarin*) have condemned its use from a consideration of its poisonous nature, and the mischief and danger they have known it to occasion: Nor can it be denied that the most fatal consequences may arise from its unguarded and long-continued use. Perhaps it should only be resorted to in such obstinate cases as resist the cinchona and other less formidable remedies; and in no instance should
its

its exhibition be persisted in beyond three or four days in succession. It should then be suspended for a week or less, and repeated again, if necessary, for three days more; after which it should be entirely laid aside: Otherwise a condition worse than the disease which it is intended to cure, may be induced. Loss of appetite, sickness, tremors, cough, twitching pains in the stomach and bowels, or a looseness, are signs of an over dose. *Wedel de Arsenico*, 1719. *Gmelin's Apparatus Medicaminum*, Vol. I.

CUPRUM ammoniacum. Ammoniated Copper. See Antispasmodics.

CUPRUM vitriolatum. (See Astringents.) Vitriolated Copper. This metallic salt has been employed for the cure of agues by some practitioners in doses of a quarter of a grain repeated three or four times a day. For this purpose it may be made into pills with the extract of cinchona, in the manner directed by Dr. *Donald Monro* (Med. and Pharmaceutical Chemistry, Vol. I.) The vitriolated copper has also been given in epilepsy and other convulsive affections; but vitriolated zinc in larger doses will be found to cure these disorders and intermittents, as speedily as the cupreous salt; and being of a less injurious nature should at all times be preferred.

FERRUM.

FERRUM. Mars. (See Vol. I. p. 298.) Iron. It is the remark of a celebrated chemist and physician, that iron is perhaps the only metal among those which possess a medicinal agency, that does not belong to the class of poisons. There is this further peculiarity with regard to iron, *viz.* that it is a constituent part of the blood, and is, in fact, the colouring principle of that vital fluid. It is also present in the muscular fibres, some atoms of it being always detected in the destructive analysis of those parts. Hence it is evident that this metal performs important offices in the animal body; and that material alterations must be produced as it is present in greater or less quantity. And certainly it holds a principal place among those substances which increase the energy of the digestive organs, of the arterial and absorbent systems, and of the fibres destined for the movement of the limbs and other parts of the body. Thus it is very successfully prescribed in all cachectic and leucophlegmatic constitutions; in chlorosis and hysteria; in gouty affections and dyspepsia, whether proceeding from hard drinking or other causes; in venous hæmorrhage, fluor albus, gleet and diabetes; in scrophulous, ricketty and phthifical cases; in mesenteric obstructions, jaundice and dropsy; in intermitting fevers, and in convalescencies from most fevers. Its use in deficient and suppressed menstruation

struation has been already noticed in Vol. I. under Emmenagogues. Concerning its action as a vermifuge, see Anthelminthics. Where there is much fulness of the vessels, or a tendency to inflammatory action, or a bilious and loaded condition of the stomach and intestinal canal, this metal and its preparations are highly improper; nor is it suited to every form and stage of the diseases above enumerated. It is a proof that chalybeate medicines disagree, if the person who is taking them complains of heat, thirst, drowsiness, head-ach, costiveness, tightness of the breath, &c.

The medicinal efficacy of this metal is often frustrated by over dosing it. In general it answers best when it is gradually introduced into the system, by administering it for a considerable length of time in small quantities, and in a state of minute division by watery solution. Hence the beneficial operation of certain chalybeate springs hereafter-mentioned. It is scarcely necessary to add, that, in order to produce the full effect of iron upon the diseased constitution, its action should be assisted by exercise. With these attentions great and permanent advantages may be derived from it in the disorders above-mentioned.

Iron is variously combined according to the different nature of the disorder in which it is prescribed,

scribed, with bitters, astringents, aloetics, diuretics, opiates. The reguline and calciform preparations (see Vol. I. p. 299) such as the *limatura* and *rubigo* are the least active forms in which iron can be given, and consequently the least adapted to the generality of cases in which a chalybeate is required. They are chiefly suited to those diseases of debility which are accompanied with acidity in the stomach and bowels. Their doses have been mentioned in the place referred to. The *Ferrum ammoniacale*, Ph. Lond. and *Ferrum ammoniatum*, Ph. Ed. (the proper title would be *Ferrum muriatico-ammoniatum*, it being a triple salt) and *Tinctura Ferri ammoniacalis*, Ph. Lond. (see Vol. I. p. 300) have been employed in epileptic, hysterical, chlorotic and scrophulous cases; also in rickets and mesenteric obstructions; but whether they are preferable in any of these instances to vitriolated or muriated iron may be doubted. Their doses have been mentioned at the place referred to. The *Tinctura Ferri muriati*, Ph. Lond. et Ed. (see Vol. I. p. 301) is an active and useful preparation; and is suited to almost every case in which a chalybeate is required; but more especially to cachectic and scrophulous affections; to hæmorrhages and fluor albus; to jaundice and dropsy. It has likewise been administered with great success in spasmodic

Vol. II. L dysury.

dysfury. (*Cline* in Medical Records and Researches.) The preparation and doses have been mentioned at the place above referred to. At p. 300 of the first Vol. we have noticed the *Ferrum tartarifatum*, Ph. Lond.; but we would here remark that the *Tinctura Ferri tartarifati* (*Marabelli* Apparatus Med. p. 299) or rather *Solutio Ferri tartarifati* is a more elegant and convenient preparation. It is made by mixing in a glass vessel three ounces of iron filings, and half a pound of crystals of tartar with a sufficient quantity of water; then subjecting the mixture to a digestion-heat for eight days, frequently stirring it during that time; afterwards boiling it for a few hours; lastly, filtrating and evaporating the saline liquor to the consistence of a thin syrup. To prevent mouldiness, an ounce and a half of rectified spirit of wine should be added to the solution when cold. It should be kept in a glass bottle well stopped. Dose from twenty to thirty or forty drops, in water or any other vehicle (excepting astringent infusions and decoctions) sweetened with syrup of orange-peel or ginger. In general, aromatic additions render it more efficacious. This is the least unpalatable of all the preparations of iron.

FERRUM *vitriolatum*. (See Vol. I. p. 301.)
Vitrio-

Vitriolated Iron. Of late years this chalybeate salt has been much used in phthifical cases, combined with myrrh and very unchemically (see *Thesaur. Med.* p. 240) with vitriolated kali also. In such cases (*viz.* those of phthisis pulmonum) it often proves too stimulant and heating, in whatever manner it may be combined, in consequence of being administered at an improper time—while some degree of inflammatory action subsists: And though it proves serviceable where no such forbidding circumstance is present; yet is it generally less availing in pulmonary consumption than vitriolated zinc. In all other respects it is applicable to the same cases as the other preparations of iron. Dose from one to six grains. *Nebel de Medicamentis Chalybeatis*, 1711, and reprinted in *Haller's Disputationes*, Vol. VII. *Alberti de Ferro*, 1738. *Buchner de viribus et usu Ferri in medicina*, 1749.

The mineral waters of Hampstead, Islington, Tunbridge, &c. of this country; those of Forges, Buffang, Aumale, Passy, &c. in France; those of Pyrmont, Spa, &c. in Germany owe their medicinal virtues to the iron dissolved in them, either by the carbonic acid (fixed air) or vitriolic acid. It is also probable that their chalybeate impregnation has a considerable share in the bene-

ficial effects produced by the hot waters of Bath and the purgative waters of Cheltenham. *Monro's Pharmaceutical Chemistry*, Vol. II. and *Saunders on Mineral Waters*, 1800.

ZINCUM calcinatum. (Flores Zinci.) Calcined Zinc. Flowers of Zinc. See Antispasmodics.

ZINCUM vitriolatum. Vitriolum album. (See p. 93 of this Volume.) Vitriolated Zinc. White Vitriol. This is a valuable tonic medicine, suited to the same cases as the saline preparations of iron, but in many disorders preferable to them, being less stimulant and heating. In particular, it is more efficacious in certain periodic affections such as intermittent fevers (*Blane's Diseases of Seamen*) in certain convulsive disorders such as whooping-cough, chorea, and epilepsy; in debilities of the stomach and intestinal canal; in fluor albus, spitting of blood and uterine hæmorrhage (see Astringents) and in phthisis pulmonalis. Dose from one to three or four grains. In larger doses it acts as an emetic. It may be given either in pills, or dissolved in pure water, or in some of the distilled aromatic waters. It is joined with bitters, astringents and opiates, according to the nature of the complaint in which it is prescribed. Myrrh, cicuta, and digitalis, are useful adjuncts
to

to it in pulmonary cases; alum (*Moseley* on tropical Diseases) and mucilages in diarrhoeas and the advanced stages of dysentery. *Crell* de Zinco medico recentius observata, 1780.

Gas oxygenum. (See Vol. I. p. 162.) Oxygenium. Oxygen gas. Oxygen. Although the inhalation of this gas, duly diluted with common air, has disappointed the expectations that were raised concerning it in certain forms of debility, such as chlorosis, epilepsy, &c. yet in other states of bodily weakness, such as asthmatic and hydropic affections, it has been administered with at least temporary relief. Yet it must be confessed that even in these cases, other powerful medicines have generally been given in conjunction with it; so as to leave it doubtful what quota of the obtained benefit was due to this gas.—Considering its chemical properties, it is reasonable to suppose it might be evolved from a mixture of pulverized manganese and vitriolic acid, by the bed-side of persons labouring under typhus, malignant small-pox, and gangrenous sore throat, with considerable advantage. See the publications referred to in the first Volume, as above;

to

to which add *Alyon* sur les propriétés medicinales de l'oxygène, 1798, and *Hill's* Observations on the Uses of Oxygen, 1800.

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OF
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Petroleum. *Rock Oil*.
Æther vitriolicus. *Æther sulphuricus*, *Vitriolic Æther*, *Sulphuric Æther*.
Spiritus Ætheris vitriolici compositus. *Compound Spirit of Vitriolic Æther*.

Cerevisia. *Malt Liquor*.
Vinum, ejusque Spiritus. *Wine and Spirit of Wine*.

(3) <i>From the Mineral Kingdom.</i>	<i>Balneum calidum.</i>	<i>The Hot</i>
<i>Ferrum ejusque præparata. Iron</i>	<i>Bath.</i>	
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	<i>Bath.</i>	
<i>Aqua calida. Hot Water?</i>	<i>Gas oxygenium.</i>	<i>Oxygen gas.</i>
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<i>Bath Waters.</i>	<i>Galvanisatio.</i>	<i>Galvanization.</i>

CLASS VIII.

STIMULANTS.

MOST of the articles of the *materia medica* might, in an extended sense, be called Stimulants; but this term is, by the general consent of physicians, restrictively applied to those medicines which possess the power of sustaining or increasing the vital energies—of rousing and invigorating the action of the heart and arteries—and of restoring to the muscular fibre, when affected with torpor, its lost sensibility and power of motion. Hence the use under proper regulations of the various articles belonging to this class in cases of gout, palsy, and malignant typhoid fever; but let it be repeated, under proper regulations; for we cannot but remark that medicines which give additional activity to the circulation, and which augment the heat and sensibility of the system throughout are often abusively employed, being administered too early as well as too freely in the abovementioned and some other similar disorders. In the beginning of typhus-fever in particular, it cannot be doubted that a hasty and lavish exhibition of such medicines has, in numerous instances, aggravated every symptom, and brought the patient, who would otherwise have had the disease in its mildest form, into considerable danger.

(1) *From*

(1) *From the Animal Kingdom.*

AMMONIA *præparata*, Ph. Lond. *Carbonas Ammoniae*, Ph. Ed. (Alkali Volatile.) Prepared Ammonia. Carbonate of Ammonia (Volatile Alkali.) The mode of preparation has been already described at pp. 139—172, Vol. I. When taken into the stomach in sufficient quantity, its stimulant effects are soon produced, but then they are soon over. Its action is not like that of alcohol, followed by dejection and languor; and it has this advantage over many other stimulants, that it passes off readily by perspiration. See DIAPHORETICS, Vol. I. p. 241, where mention is made of gout, palsy, and other diseases in which it is useful. For other observations on its medicinal properties, see ANTISPASMODICS. Dose from five to fifteen grains. The *Sal C. C.* (Salt of Hartshorn) Ph. Lond. differs from the ammonia *præparata* in no other respect than in having an admixture of empyreumatic oil. It is given in the same cases and in the same doses. Of the *Aq. Ammoniae*, Ph. Lond. *Aq. Carbonatis Ammoniae*, Ph. Ed. (formerly called *Sp. Salis Ammoniaci*) the preparation has been described at p. 173, Vol. I. Dose from thirty to eighty drops. The *Liquor Vol. C. C.* Ph. Lond. (formerly called *Sp. C. C.* Spirit of Hartshorn) differs from the *aqua ammoniæ*, Ph. Lond. in no other respect than

in having some admixture of empyreumatic oil. It is given in the same cases and in the same doses. In like manner may be employed the *Sp. Ammonia*, Ph. Lond. *Alkohol Ammoniatum* Ph. Ed. (formerly called *Sp. Salis Ammoniaci dulcis*) for the preparation of which see Vol. I. p. 242. It is sometimes added to gargles in inflammatory angina. The *Sp. Ammonia compositus*, Ph. Lond. *Alkohol Ammoniatum aromaticum* Ph. Ed. is the last mentioned preparation, with the addition of the essential or volatile oils of certain aromatic vegetables. The aromatic ingredients in the preparation of the London college are the essential oils [volatile oils] of lemon peel and of cloves: the aromatic ingredients in the Edinburgh preparation are the volatile oils of rosemary and of lemon peel. The Ed. preparation is the most aromatic of the two. Dose of either from fifteen to sixty drops. The *Sp. Ammonia succinatus* Ph. Lond. (formerly called *Sp. Salis Ammoniaci succinatus*), is prepared by first dissolving ten grains of soap and one scruple of oil of amber in one ounce of alkohol, and afterwards adding four ounces of water of pure ammonia. It is supposed to be the same with the celebrated French preparation called Eau de Luce, and is used both internally and externally in convulsions, delirium, asphyxia, paralysis, chronic rheumatism, and in the bites of vipers and other venomous animals. While it has been applied externally to the wounded part,

it has been administered at the same time internally, diluted with wine or water, in doses of five, ten, or twenty drops, in cases of viper-bites, and the bite of a mad dog. The testimony in favor of its efficacy in the latter case is not the most satisfactory; but in cases of viper-bites it has been employed very successfully (*Duncan's Commentaries* for 1788 and 1789); and although it failed in the experiments of the Abbe Fontana, yet it seems, from a general review of the evidence respecting it, to resist more powerfully than any other known remedy the life-destroying action of the viper's poison. This and the beforementioned preparations are also used as stimulating odoramenta, in cases of deliquium, hysteria, &c. *Sp. Ammoniaæ fœtidus* Ph. Lond. *Alkohol Ammoniatum fœtidum* Ph. Ed. (formerly called *Sp. Volatilis fœtidus*) See ANTI-SPASMODICS.—*Linimentum Ammoniaæ* Ph. Lond. (formerly called *Linimentum Volatile*) is compounded of water of ammonia one part, olive-oil three parts. This liniment proves an useful application when rubbed upon the skin in cases of fixed or deeply seated pain and inflammation. It is a well-known epithem in cases of inflammatory angina, in which cases it is spread upon a piece of thick flannel and applied round the throat. (*Thesaur. Med.* Third Edition, p. 238.) The *Linimentum Ammoniaæ fortius*, Ph. Lond. consists of water of pure ammonia, one part, olive-oil, two parts. The *Oleum Ammoniatum*,

Ph. Ed. consists of the same ingredients, but in different proportions, viz. one part of the water of ammonia, Ph. Ed. (i. e. water of *pure* ammonia, Ph. Ed.) to eight parts of olive-oil. Camphor and opium are frequently added to these liniments in extemporaneous prescriptions.

MOSCHUS moschiferous. The musk-deer. The peculiar scented secretion of this animal, termed musk. See ANTISPASMODICS.

MELOE vesicatorius. (Cantharis) Spanish fly. Insecta Coleoptera. Southern parts of Europe. Spanish flies or cantharides are stimulant and irritating in so great a degree, that their internal exhibition requires to be conducted with the utmost caution; otherwise inflammation in the stomach, intestines, or urinary passages may be the consequence. Of their internal use in dropical cases, notice has been taken under DIURETICS, in the first vol. of this work. It belongs to this place to mention their exhibition in incontinence of urine, proceeding from paralysis vesicæ, in gleet, fluor albus, diabetes, and other diseases of the urinary passages, originating in or connected with debility. Not only in the incontinency of urine which accompanies a palsy of the lower extremities, but also in the incontinency of urine which is occasioned by an overdistention of the bladder, these flies have been

been administered internally with evident relief. (*Carmichael Smyth* in *Med. Communications*, Vol. II.) The same beneficial effects have followed their use in ischuria vesicalis or suppression of urine from overdistention of the bladder (*Yonge* in *Phil. Trans.* Vol. XXIII. No. 280, *Werlhof* *Oper. Med.* à *Wichman*, pp. 698—699, and *Carmichael Smyth* as before quoted). They are recommended as an excellent remedy in gleans, by *Mead* and *Werlhof*; and the last mentioned physician prescribed them in cases of hydrophobia. See ANTISPASMODICS, where their use in the last mentioned disorder, as well as in whooping cough, will be particularly considered. Cantharides have been given internally in the gout (*Græuvelt* de tuto Cantharidum interno Ufu, 1698); but in the last mentioned disorder this mode of treatment is by no means to be commended.

When these acrid stimulants are administered internally, they are prescribed either in powder or in tincture. The dose in substance (which is the most certain form for internal exhibition) is from half a grain to one or two grains, every sixth hour, made into pills. Of the tincture the dose is from ten to thirty drops. During the use of either, the patient should be directed to drink of mucilaginous decoctions, emulsions, &c. Camphor is thought by some practitioners to moderate the too stimulating action

action of cantharides, and is accordingly combined with them or their tincture, whenever they are given internally. Others join nitre with them, as well as camphor. The *Tinctura Cantharidis*, Ph. Lond. is made by digesting for eight days, two drachms of cantharides, and half a drachm of cochineal in a pint and half of proof spirit. The *Tinctura Meloës Vesicatorii*, Ph. Ed. is made by digesting for seven days, one drachm of cantharides in one pound of proof spirit. The dose internally of these tinctures has been mentioned. They are used topically as a rubefacient, in cases of palsy, (Thesaur. Med. Third Edition, p. 238) angina, gastritis, &c. The *Emplastrum Cantharidis*, Ph. Lond. (formerly called *Emplastrum Vesicatorium*) is compounded of Spanish flies, one pound, wax-plaster, two pound, hog's-lard, half a pound. The two last ingredients being melted together, the pulverized Spanish flies are mixed with them while yet hot and in a liquid state. The *Emplastrum Meloës Vesicatorii*, Ph. Ed. (formerly called *Empl. Vesicatorium*) consists of equal parts by weight, of mutton suet, yellow wax, rosin, and Spanish flies, the pulverized flies being added to the melted suet, wax, and rosin. The *Emplastrum Meloës Vesicatorii compositum*, Ph. Ed. is compounded of Venice turpentine, Burgundy pitch, Spanish flies, each twelve parts, yellow wax, four parts, sub-acetite of copper (verdigris) two parts, mustard seed and black pepper, each one part. The pitch and wax are first melted, the turpentine

pentine is then added, and to these, while still in fusion, are added the other ingredients reduced to a powder. This last mentioned plaster of Spanish flies is too compound, and being of a corrosive quality is rarely prescribed. The other more simple forms of cantharides plaster are in frequent use for exciting vesications in various acute and chronic diseases, particularly in internal inflammations and pains, as well as in many spasmodic affections. Blistering has been recommended by some physicians in the advanced and sinking stage of typhus-fever; but the propriety of such a practice is extremely questionable. We would further remark that in the febrile disorders of children, a good deal of caution is requisite in the application of blisters, a spreading erythematous inflammation, and even gangrene being sometimes the consequence. In some of the abovementioned disorders much benefit is obtained by keeping the blistered part open, or in an ulcerated state, for a considerable length of time. This is done by means of any of the following ointments, viz. *Unguentum Cantbaridis, Ph. Lond.* (formerly called *Unguentum ad Vesicatoria*) prepared by taking pulverised Spanish flies, two ounces, distilled water, eight ounces, ointment of yellow rosin, eight ounces. The Spanish flies being boiled in the water till it is reduced to half the original quantity, the liquor is strained and the ointment of yellow wax added. The mixture is then placed in a water bath,

bath, saturated with sea salt, and evaporated to the consistence of an ointment. With this corresponds the *Ung. Infusi Meloës Vesicatorii*, Ph. Ed. (formerly called *Ung. Epispasticum mitius*) in which are the following ingredients: Spanish flies, white rosin, yellow wax, each one part, Venice turpentine and hog's lard, each two parts, boiling water, four parts. The Spanish flies are steeped for the space of a night in the water, and the strained liquor is afterwards boiled with the lard till all the water is evaporated; the wax and rosin are then added, and when they are melted, the turpentine. The *Ung. Pulveris Meloës Vesicatorii*, Ph. Ed. (formerly called *Ung. Epispasticum fortius*) is made by mixing one part of pulverized Spanish flies with seven parts of resinous ointment. For the same purpose is sometimes used the *Unguentum Sabinæ*. (See *Juniperus Sabina*.) *Stenzel* de Cantharidibus, 1740. *Forsten* de Cantharidibus, 1769, (reprinted, 1776.) *Linnaeus* *Meloe Vesicatorius*, *Amœnitat. Acad.* Vol. VI. *Tralles* de Ufu Vesicantium, 1776. See also the writings of *Baglivy*, *Hoffman*, *Freind*, *Huxham*, *Pringle*, *De Haen*, &c.

PHOSPHORUS. This inflammable substance has been recommended by some practitioners as a potent stimulus in the advanced and sinking stage of typhus-fever, in palsies, and in various other disorders originating in or connected with debility (Vide

Halleri

Halleri Disputationes, Vol. VII. and the authors quoted in the Observations on the Medicinal Virtues of Phosphorus, inserted in the First Vol. of the Lond. Med. Rev. and Mag. These practitioners have given from the eighth (or only the sixteenth) part of a grain to one or two grains, for a dose. It was found to raise the pulse, to bring on a perspiration, and to remove the low delirium in cases of malignant fever; while in palsies it is said to have produced a glow over the whole body, and to have restored feeling and susceptibility of motion to the muscular fibre. The breath of persons who have taken phosphorus is extremely offensive, and their faces are luminous in the dark. It has been administered either in a state of solution in æther, or incorporated by trituration with mucilages and oils. (*Hartman de Ufu Phosphori Interno Medico.*) It is evident that this inflammable substance, when taken into the stomach, where it must always meet with a sufficient quantity of atmospheric air for its combustion, must act on the internal surface of that viscus, after the manner of an actual cautery; an effect, which if produced in a considerable degree on an organ so essential to life, must ever be considered to be of the most hazardous kind. Accordingly it has been confessed by some practitioners who were bold enough to exhibit the phosphorus internally, that inflammation and mortification of the stomach and intestines may be suspected in some instances,

instances, to have been the consequence (*Weickard* in *Lond. Med. Rev. and Mag.* before quoted). And if it has sometimes been swallowed in doses of one, two, or three grains, without manifest injury, this may be attributed to the very gradual and partial combustion of the phosphorus, in consequence of its being defended from the action of the atmospheric air present in the stomach, by its envelopment in the oils or mucilage with which it was previously mixed, or by the slimy and bilious contents of the stomach itself. Seeing that when given internally it produces the effects of an actual cautery, endangering in a greater or less degree, according to the quantity administered, the organization of parts essential to life, we are of opinion that phosphorus should be expunged from the catalogue of internal medicines. Nevertheless, for the satisfaction of those who may be desirous of further information on this subject, we shall refer, in addition to the authorities before quoted, to *Buckner's Dissertat. de Phosphori Ufu Medico*, inserted in the First Vol. of *Sandifort's Thesaurus*.

ACIDUM phosphoricum. Phosphoric acid. This is said to be a useful stimulus in cachectic cases, in caries ossium and in scrophulous affections. Dose of the concentrated phosphoric acid, procured by the action of nitric acid on phosphorus, from two or three to eight or ten drops, diluted with a suffi-

cient

cient quantity of water. It is a sufficiently safe, and manageable remedy, very different in these respects from phosphorus itself. A much greater number of facts, however, than those hitherto produced, will be required to establish its character as an efficacious remedy in the disorders abovementioned.

(2) *From the Vegetable Kingdom.*

¶ *ACORUS Calamus.* Hexandria Monogynia. Piperitæ. Indigenous. (*Calamus Aromaticus. Radix.*) Sweet Flag. The root of this plant has been commended as a stomachic by some old writers on the materia medica, and formerly various preparations from it were kept in the shops; such as a distilled water, a distilled oil, &c. but the root itself, with its preparations, has now justly fallen into disuse. The materia medica affords a variety of much pleasanter, as well as much more powerful aromatics.

ALLIUM sativum. (See Vol. I. p. 141.) Garlic. The roots or bulbs of this plant are used both internally and externally as a stimulant, from one to three or four of the bulbuli of the roots termed cloves, have been swallowed night and morning in ague-cases, with very great benefit; they have also been given in worm-cases in the same manner,

manner, and with the same success. (See ANTHELMINTICS. Moreover garlick has been administered internally, with manifest advantage, in humoral asthma (See EXPECTORANTS) and dropfy. The expressed juice, or an infusion, or a decoction of the roots in milk, are suited to the last mentioned disease, and the form of a syrup to asthma. The *Syrupus Allii* of the Swedish pharmacopœia has been already described at p. 141, Vol. I. of this Synopsis. Formerly there was a similar preparation in the London pharmacopœia.—Externally the bruised roots alone, or mixed with other ingredients, have been applied in the form of a cataplasm to the soles of the feet, the wrists, and other parts of the body, in eruptive fevers (*Sydenham*) in the cold fit of intermittents, (*Lind*) &c. And *Bergius* directs the juice to be applied by means of cotton to the meatus auditorius, in cases of rheumatic deafness (*Thesaur. Med.* Third Edition, p. 240.—*Wedel de Allio.*)

AMOMUM repens. [Amomum Cardamomum.]
Monandria Monogynia. Scitamineæ. East Indies, Syria, and Egypt. (Cardamomum minus. Semen.) Lesser Cardamom. The seeds of this plant abound in a fragrant aromatic oil, and consequently prove a grateful and powerful stomachic, in cases of dyspepsia, flatulent colic, &c. In the London pharmacopœia there are two tinctures of cardamom

damom, in a simple, and a compound tincture; the first named *Tinctura Cardamomi*, prepared by digesting for eight days, three ounces of the bruised seeds in two pints of proof spirit. Dose from one to three drachms. The other named *Tinctura Cardamomi composita* (formerly called *Tinctura stomachica*,) prepared by digesting for fourteen days, two drachms of the cardamom-seeds, two drachms of carraway seeds, 2 drachms of cochineal, half an ounce of cinnamon, and four ounces of raisins, in two pints of proof spirit. It would be an improvement in this preparation, if the proportion of cardamom seeds were increased, if the cochineal were omitted, and if, instead of four ounces of raisins, one ounce of pulverized sugar-candy were to be added, after the digestion was over. Dose from one drachm to half an ounce or more. It is a weaker aromatic than the simple tincture of cardamom. *Tinctura Amomi Repentis*, Ph. Ed. is prepared by digesting for seven days, four ounces of the bruised seeds in two pounds and half of proof spirit. Dose from one to two or three drachms.

AMOMUM Zingiber. Class and order the same as in the preceding. East and West Indies. (Zingiber. Radix.) Ginger. This is the least acrimonious of all the foreign aromatics. It may be taken in considerable quantities, either with food or

medicine, being an excellent stimulant, particularly suited to constitutions subject to flatulency, atonic gout, and other disorders characterized by want of energy in the organs of digestion. In these cases it may be given either by itself, or combined with bitters and other tonics. It is also joined with absorbents. It is a common and useful addition to cathartic medicines, particularly to infusions and tinctures of the vegetable cathartics, serving to moderate their irritating action on the bowels. The pulverized root may be given in doses of ten to thirty grains. It has sometimes been used with advantage as a masticatory in strumous affections of the tonsils (See Vol. I. p. 114.) It is often prescribed in the form of a watery infusion, (ginger tea) which is made by steeping two ounces of the bruised root in one pint of boiling water. A wine glass full of such an infusion, taken warm three or four times a day, has afforded great relief in many cases of gouty dyspepsia. The officinal preparations are a syrup and tincture. The *Syrupus Zingiberis*, Ph. Lond. is made by steeping four ounces of bruised ginger in three pints of boiling water, for four hours; then straining and adding a sufficient quantity of white sugar. The *Syrupus Amomi Zingiberis*, Ph. Ed. is made by steeping three ounces of bruised ginger in four pounds of boiling water, for twenty-four hours; then adding to the strained liquor seven pounds and half of white sugar. Dose
of

of either from one to three or four drachms. The *Tinctura Zingiberis*, Ph. Lond. is made by digesting for eight days, two ounces of pulverized ginger, in two pounds of proof spirit. Dose one or two drachms.

¶ *AMYRIS Elemifera*. Octandria Monogynia. Dumosæ. Arbor. Spanish America. (Elemi Refina.) Elemi. This resinous substance is employed in the preparation of the ointment named after it, in the Lond. Ph. and which is used as a stimulant application to foul ulcers. It may be doubted whether for this or any other purpose, it is at all preferable to common rosin.

¶ *AMYRIS Gileadensis*. Class and order as before. Arbor. Arabia. (Balsamum Gileadense. Balsamum e Mecca. Opo-balsamum. Refina liquida.) Balsam of Gilead. Agrees in its medicinal properties with the balsam of Canada, which see.

ANETHUM Fœniculum. Pentandria. Digynia. Umbellatæ. Indigenous. (Fœniculum Dulce. Semen) Sweet Fennel. The seeds of this plant are a light pleasant aromatic. A distilled water is prepared from them.

¶ *ANETHUM graveolens*. Class and order as above. Cultivated in gardens. (Anethum. Semen.)

men.) Dill. Lightly aromatic, but less palatable than the preceding. The officinal preparation from it is a distilled water. A superfluous addition to the materia medica-list.

¶ *ANGELICA Archangelica.* Class and order as of the last. Cultivated in gardens. (*Angelica Radix. Folium. Semen.*) *Angelica.* The root, leaves and seeds of this plant possess an agreeable aroma; but we do not conceive that for any purposes, this plant or any part of it, can be preferable to the sweet fennel, anisum, cardamom, carraway, ginger, or peppermint.

ANGUSTURA (Cortex:) *Angustura Bark.* See TONICS.

ANTHEMIS Pyrethrum. (*Radix.*) Pellitory of Spain. See SIALAGOGUES, Vol. I. p. 115.

ARISTOLOCHIA Serpentaria. (*Serpentaria Virginiana. Radix.*) Virginian Snake-root. To the uses of this aromatic bitter in typhus and intermittent fever, as mentioned under DIAPHORETICS, (Vol. I. p. 245,) we may add that it is also advantageously prescribed in cases of atonic gout, and the clonus hystericus of Sydenham. Concerning the preparations and doses of this drug, see the class above referred to.

ARNICA

ARNICA montana. Syngenesia Polygamia Superflua. Compositæ radiatæ. Northern parts of Europe. (Herba. Flos. Radix.) Leopard's-bane. The herb, flowers, and root of this plant are frequently and not unsuccessfully prescribed by the continental physicians, and particularly by the physicians of Vienna, in cases of typhus fever, and intermittent fever; in the advanced and sinking stages of dysentery; in palsy, and in various other states of debility, both with and without febrile affection of the system. They prescribe it in substance, as well as in infusion and decoction, of all which formulæ, examples are given in the *Thesaurus Med.* (Third Edition, pp. 213, 221, 228, and 229,) whither the reader is referred for other remarks concerning the use of this vegetable. In many cases it may be advantageously joined with the Peruvian bark. Of the dried flowers, the dose in substance is from five to ten grains. Generally, however, the form of an infusion is to be preferred, made with half a drachm or one drachm of the flowers to a pint of water. As this remedy produces violently irritating effects upon the stomach when administered too freely, it will always be advisable to begin with moderate doses. *Buckner* de Effectibus Arnicæ, 1741. *Schutt* de Viribus Arnicæ, in the Fourth Vol. of *Baldinger's Sylloge*.

ARUM maculatum. (See Vol. I. p. 142.) Wake-

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robin.

robin. The fresh root of this plant has been given with success in some cases of chronic rheumatism, either in the form of an electuary (*Thesaur. Med.* p. 220, Third Edition,) or in the officinal form of a conserve; so that in either way ten or fifteen grains of the root be taken thrice a day. An extract prepared from the root and leaves is recommended by Gesner. Of its use in humoural asthma, mention has been already made under EXPECTORANTS (See Vol. I. p. 143.) *Wedelius de Aro*, 1701.

BUBON Galbanum. The medical virtues of this gum-resin, galbanum, have been detailed under the class of EMMENAGOGUES (See Vol. I, p. 289,) to which the reader is referred for an account of its preparations and doses. It is usefully joined with bitters and opiates in hysterical affections, possessing the efficacy, without the disagreeable smell of asafoetida,

¶ **CANELLA alba.** Dodecandria Monogynia. Oleraceæ. West India Islands. Arbor. (Cortex.) *Canella alba.* The dose of this aromatic bark is from ten to thirty grains. It is rarely administered alone, and may well be erased from the long list of stimulant drugs.

CAPSICUM annuum. Pentandria Monogynia. Solanaceæ.

nacæ. South America, and by cultivation in the West Indies. (*Piper Indicum*. Capsula.) Red Pepper. Cayenne Pepper, The capsula or pod of this plant is one of the most pungent and powerful aromatics. Its use as a condiment is well known. Of late years its stimulant properties have been rendered subservient to medicinal purposes. It has been given with manifest advantage in cases of gouty dyspepsia, in some hydropic affections joined with paralytic symptoms, and in the advanced and sinking stage of typhus and the malignant endemic fever of the West Indies. (*Simmons's Medical Facts and Observations*, Vol. VII.) Also, in the malignant sore throat, in which it has had a good effect, both when taken into the stomach, and when used as a gargle. *Bergius* relates that he prescribed the seeds with success in obstinate agues. Of the dried and pulverized capsules, the dose, internally, is from one to three grains. In the advanced stage of the yellow fever double the last mentioned quantity has been given at a time. The gargle is prepared by macerating the powder first in warm vinegar, and afterwards adding a proper quantity of hot water, and continuing the maceration for a sufficient length of time. The proportions, two drachms of the capsicum to half a pound of each menstruum. (*Thesaur. Med.* p. 211.)

CARUM *Carui*. Pentandria Digynia. Umbel-

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latæ.

latae. Cultivated in gardens. (Caruon. Semen.) Carraway. The seeds of this plant are a warm and efficacious aromatic, well suited to cases of flatulency, dyspepsia, and colic. They are a frequent and useful addition to cathartic medicines, whose irritating action upon the stomach and intestinal canal is thereby diminished. The officinal preparations are, a distilled oil and a spirit. Dose of the oil, from one to three or four drops; of the spirit, from one drachm to half an ounce.

Cistus Creticus. Polyandria Monogynia. Afcyroideæ. Syria, Cyprus, and other parts of the Levant. (Ladanum. Refina.) Cretan Cistus. Ladanum. This resinous substance is the basis of the *Emplastrum Ladani compositum*, Ph. Lond. (formerly termed *Emplastrum Stomachicum*,) which is composed of ladanum three ounces, frankincense one ounce, pulverized cinnamon and expressed oil of nutmeg, called oil of mace, each half an ounce, oil of spearmint one drachm. The ladanum previously softened by the fire, is added to the melted frankincense, and then the oil of mace. These are afterwards beaten together in a warm mortar with the cinnamon and spearmint oil, so as to form a plaster, which is applied to the epigastric region, in cases of dyspepsia, gouty flatulency, and spasms of the stomach.

CITRUS Aurantium. (*Aurantium Hispalense.*) The Seville Orange. The stomachic virtues of the rind of this fruit have been already sufficiently described under the class of TONICS, p. 112, of this volume.

CLUTIA Eluteria. Cascarilla. See TONICS, p. 113.

COCHLEARIA officinalis. *Tetradynamia Siliculosa.* *Siliculosæ.* Northern parts of Europe. (*Cochlearia hortensis.* *Herba.*) Scurvy-grass. The fresh herb is a well known antiscorbutic. Its expressed juice is a principal ingredient in the *Succus Cochleariæ Compositus*, Ph. Lond. which consists of the juice of scurvy-grass two pints, the juice of brook-lime and water cresses, each one pint, and the juice of Seville oranges, twenty ounces by measure. The *Succus Cochleariæ Compositus*, Ph. Ed. consists of the juice of scurvy-grass, of water cresses, and of Seville oranges, each two pounds, spirit of nutmegs, half a pound. Dose three or four ounces twice or thrice a day.

COCHLEARIA Armoracia. Class and order as of the last. Cultivated. (*Raphanus rusticanus.* *Radix.*) Horseradish. The root of this plant is stomachic and antiscorbutic, in a very considerable degree. Its use as a condiment has been already noticed

noticed at p. 54, Vol. I. of this work. In this place it will be sufficient to mention that a strong infusion of the horseradish is a good remedy in many cases of palsy and chronic rheumatism. *The-saur. Med.* p. 228 and 232, where other observations respecting the medicinal uses of this root are given. The *Spiritus Raphani Compositus*, Ph. Lond. is prepared by distilling with proof spirit (and water sufficient to prevent empyreuma) fresh horseradish root, Seville orange peel, scurvy-grass, and bruised nutmegs. Dose from two drachms to half an ounce.

COPAIFERA officinalis. Class and order as mentioned at p. 145, Vol. I. (*Balsamum Copaiva. Resina liquida.*) Balsam of Copaiva. West Indies and South America. This resinous juice is frequently given in cases of fluor albus and gleet; but in both these cases, and especially in the former, it proves in many instances too irritating. It has sometimes been prescribed with good effect as a laxative, in hæmorrhoidal affections (*The-saur. Med.* p. 235.) Dose twenty, thirty, or forty drops.

CORIANDRUM sativum. Pentandria Digynia. Umbellatæ. Southern parts of Europe. (Semen.) Coriander. The seeds of this plant coincide in their medicinal properties with the seeds of the carraway. They are employed to dispel flatulency, and

and are frequently added to infusions and tinctures of cathartic drugs, to lessen their irritating effects on the stomach and intestines.

CROTON *Elutheria*. See *Clusia Eluteria*.

¶ CUMINUM *Cuminum*. Pentandria Digynia. Umbellatæ. Egypt, and by cultivation, in Sicily and Malta. (Semen) Cummin. The seeds of this plant agree in their aromatic properties with those of the anethum. For all medicinal purposes they are less eligible than the seeds of cardamom, carraway, or coriander, and may therefore well be dispensed with. The officinal preparations into which these seeds enter, are the *Cataplasma Cumini*, Ph. Lond. and the *Emplastrum Cumini*, Ph. Lond. The first of these preparations consists of cummin-seeds, bay berries, scordium, Virginian snake root, and cloves made into a cataplasim with honey. The other is composed of cummin seeds, carraway seeds, bay berries, Burgundy pitch, and yellow wax. The pitch and wax being melted, the other ingredients are mixed with them, so as to form a plaster. Both the cataplasim and plaster are applied to the epigastric region, and to other parts of the abdomen, in disorders of the stomach and other viscera.

DAPHNE *Mezereum*. (See Vol. I. p. 115.) Mezerion. The root of this acrid plant is frequently prescribed

prescribed in the form of a decoction, in venereal, rheumatic, glandular, and cutaneous affections. It is an ingredient in the *Decoctum Sarsaparillæ compositum*, Ph. Lond. (for which see p. 232, Vol. I.) and is the basis of the *Decoctum Daphnes Mezerei*, Ph. Ed. which is made by boiling two drachms of the bark of this root, and half an ounce of liquorice root, in three pounds of water down to two pounds. Dose from a quarter to half a pint, three or four times a day, in the cases abovementioned. The fresh root, bruised, is used externally as a rubefacient.

DORSTENIA Contrajerva. (See p. 249, Vol. I.) *Contrayerva.* The use of this drug in malignant forms of typhus, and in the advanced stage of dysentery, &c. has been already noticed at the place above referred to; where also the preparation and doses of the *Pulvis Contrayervæ compositus*, Ph. Lond. are mentioned. Its decoction is sometimes used as a gargle (with the addition of vinegar, honey, and tincture of myrrh) in the gangrenous fore throat (*Thesaur. Med.* p. 147.)

¶ *ERYNGIUM maritimum.* Pentandria Monogynia. Umbellatæ. Indigenous. (Radix) Eryngo. The medicinal powers of this vegetable are so very inconsiderable, that it is surprising that it should hold a place in any of the modern pharmacopœias.

EUCALYPTUS piperita (*Eucalyptus obliqua*?)
Icosandria Monogynia. New Holland. The leaves of this tree abound in a pungent volatile oil, in smell and taste not very dissimilar to the oil of peppermint. Although not quite so pleasant (having somewhat of a camphorated taste with it) as the oil last mentioned, yet it would probably answer in cases of dyspepsia, flatulency, colic, &c. as well as the peppermint; and in some disorders where a more pungent stimulant is required, better. See *White's Voyage to New South Wales*.

EUGENIA caryophyllata. Isocandria Monogynia. Hesperideæ. East Indies. (*Caryophyllus aromatica*. *Caryophyllus aromaticus*. *Pericarpium immaturum*, et *oleum ejus essentiale*, Ph. Lond. *Floris germen*, Ph. Ed. Arbor.) Clove. The spice termed clove, is the dried unripe flower bud and seed vessel of the tree above mentioned. It is among the warmest and most powerful aromatics. It is an ingredient of the *Confectio aromatica*, Ph. Lond. *Electuarium Scammonii*, Ph. Lond. &c. Dose from five to ten grains. *Thunberg de Caryophyllis aromaticis*, 1788.

FERULA assafætida. (See p. 145, Vol. I.) Asa-fœtida. Concerning the use of this diffusively and powerfully stimulating gum-resin, in certain morbid affections of the pulmonary organs, mention
has

has been made in the place above referred to. It is not less serviceable in some cases of flatulency, and in amenorrhœa depending upon diminished action of the uterine vessels. It is frequently prescribed in hysteria; but against this disorder, opium and the volatile alkali are more to be relied on. It is administered clysterwise in worm cases. The doses and officinal preparations of this drug have been already mentioned at pp. 145 and 291 of the Vol. above referred to.

GUAIACUM officinale. (See Vol. I. p. 249.)
Guaiacum. The medicinal powers of the wood and resin of this tree, with the preparations and doses of both, have been already mentioned in the Vol. above referred to, under the class of DIAPHORETICS.

¶ *INULA Helenium.* (See p. 121 of this Vol.)
Elecampane. The root of this plant is lightly aromatic and bitter. There are so many vegetables that possess both these qualities in a superior degree, that it may justly be deemed a superfluous article in the list of the materia medica. Dose of the pulverized root from half a drachm to one drachm.

¶ *JUNIPERUS communis.* (See p. 227, Vol. I.)
Juniper. The berries and tops of this shrub
abound

abound in a fragrant aromatic oil, the medicinal uses of which, together with the various preparations and doses, have been mentioned in the Vol. above referred to, under the class of DIURETICS.

JUNIPERUS Lycia. Class and order as of the last. Arabia. (Olibanum. Gummi-resina.) Olibanum. Supposed to be the frankincense of the ancients. This gummy-resinous substance may be used for the same purposes as mastich, ladanum, or common frankincense (thus) which see.

JUNIPERUS Sabina. Class and order as above. (See p. 293, Vol. I.) Savin. Internally this plant is rarely employed otherwise than for the purpose of promoting the menstrual evacuation. (See EMMENAGOGUES at the place above referred to.) An ointment prepared from the bruised leaves is used to excite a purulent discharge from blisters and issues. This ointment is composed of fresh juniper-leaves bruised three ounces, yellow wax three ounces, hog's lard one pound. The leaves are added to the melted wax and lard, and the whole is afterwards strained. The Extract, Tincture and other preparations of this plant have been described under the class abovementioned.

KÆMPFERIA rotunda. (See p. 122 of this Vol.) Zedoary. The root of this plant possesses considerable

derable stomachic virtues, and has accordingly been prescribed with good effect in cases of dyspepsia, flatulent colic, chronic diarrhoea, hysteria, and febrile debility. Dose of the pulverized root from fifteen grains to two scruples.

LAURUS Camphora. (See p. 251, Vol. I.) Camphor. The medicinal powers of this drug have been already detailed, together with its preparations and doses, at the place above referred to, under the class of DIAPHORETICS.

LAURUS Cinnamomum. Class and order as above. Arbor. Ceylon. (*Cinnamomum*. Cortex, et ejus Oleum essentielle.) Cinnamon. This is the most agreeable of all aromatics, and is at the same time sufficiently powerful for all cases where a warm and penetrating stimulant is required. Hence its general use in debilities of the stomach, and alimentary canal, in atonic gout, &c. It is added to bitter and other tonic medicines, to promote their efficacy; and to cathartic drugs, to render them less disagreeable to the stomach, and less griping in their operation. Of the pulverized bark, the dose is from five to fifteen grains. The preparations of this aromatic in the London and Edinburgh pharmacopœias, are the following: *Aqua Cinnamomi*, Ph. Lond. (formerly *Aqua Cinnamomi simplex*) and *Aqua Lauri Cinnamomi*, Ph. Ed.

Ed. made by distilling one pound of the bruised cinnamon in as much water as may suffice to prevent empyreuma. In the London formula, it is directed to macerate the cinnamon for twenty-four hours previous to the distillation. A gallon of water is distilled from the abovementioned quantity of this aromatic bark. Dose from one to two ounces. *Spiritus Cinnamomi*, Ph. Lond. (formerly *Aqua Cinnamomi Spirituosa*) is made by distilling one pound of bruised cinnamon, in a gallon of proof spirit of wine, with water sufficient to prevent empyreuma. A gallon is distilled off. The *Sp. Lauri Cinnamomi*, Ph. Ed. is made by distilling half a pound of bruised cinnamon in nine pounds of diluted alcohol, with water sufficient to prevent empyreuma, the cinnamon being previously macerated with the alcohol for the space of two days. Nine pounds of spirit are distilled off. Dose of these elegant aromatic spirits from one to three drachms. The *Tinctura Cinnamomi*, Ph. Lond. is made by digesting for ten days, one ounce and half of bruised cinnamon in one pint of proof spirit of wine. The *Tinctura Lauri Cinnamomi*, Ph. Ed. is made by digesting for seven days, three ounces of bruised cinnamon in two pounds and a half of diluted alcohol. Dose of either from half a drachm to two drachms. The *Tinctura Cinnamomi composita*, Ph. Lond. (formerly *Tinctura aromatica*,) is made by digesting for eight days, bruised cinna-

Vol. II. O mon,

mon six drachms, lesser cardamoms three drachms, long pepper and ginger in powder, each two drachms, in two pints of proof spirit of wine. The *Tinctura Cinnamomi composita*, Ph. Ed. consists of bruised cinnamon, lesser cardamom seeds bruised, each one ounce, long pepper, pulverized, two drachms, diluted alcohol 2 pounds and a half, digested together for seven days. Both these tinctures are very hot, stimulant preparations, and accordingly are prescribed in small quantities, (viz. from half a drachm to one drachm) added to other cordial and tonic medicines, in dyspeptic affections, gouty languor, flatulency, &c. In addition to the abovementioned preparations, cinnamon is an ingredient in the *Tinct. Cardamomi comp.* Ph. Lond. in the *Sp. Lavendulæ comp.* Ph. Lond. et Ed. in the *Confectio Aromatica*, Ph. Lond. in the *Pulvis Aromaticus*, Ph. Lond. et Ed. in the *Pulvis Cretæ comp.* Ph. Lond. in the *Pulvis Carbonatis Calcis comp.* Ph. Ed. and in the *Trochisci Cretæ*, Ph. Lond. *Wedel de Cinnamomo*, 1707. *Gmelin de Analepticiis quibusdam nobilioribus e Cinnamomo*, 1763. *Thunberg* on Cinnamon, in the Swedish Transactions for 1780.

LAURUS Cassia. Class and order as above. Arbor. East Indies. (*Cassia lignea*. Cortex. Flos nondum explicitus.) The cassia bark and flower buds, gathered before they expand, and dried,

dried, coincide in medicinal virtues with the true cinnamon, for which it is a common substitute.

LAURUS nobilis. Class and order as before. Southern parts of Europe. (*Laurus. Folium. Bacca ejusque Oleum.*) The bay-tree. The leaves and berries abound in an aromatic oil. A decoction of the leaves is sometimes used externally as a discutient. They enter into the *Decoctum pro Fomento*, Ph. Lond. The berries enter into the composition of the *Emplastrum Cumini*, Ph. Lond. and *Cataplasma Cumini*, Ph. Lond. The expressed oil of the berries (*Oleum Laurinum*) has a place in most of the foreign dispensatories, and is applied externally as a liniment in rheumatic and other local affections. For these purposes, however, we would prefer combinations of camphor with olive-oil or with soap, or solutions of camphor in alcohol; of all which there are formulæ in the London and Edinburgh pharmacopœias.

LAURUS Sassafras. (See p. 255, Vol. I.) *Sassafras.* The medical uses of the wood, root, bark, and essential oil of this tree, have been already noticed at the place above referred to, under the class of DIAPHORETICS.

LAVANDULA Spica. Didynamia Gymnospermia. Verticillatæ. Southern parts of Europe.
O 2 (Lavendula,

(*Lavendula*. Flos. *Spica florens*.) Lavender. The flowers and flowering spikes are lightly aromatic, and possess an agreeable odour; to which last this vegetable is chiefly indebted for the place it still retains in the list of the materia medica. The *Sp. Lavendulae*, Ph. Lond. is made by distilling in a water bath one pound and a half of lavender flowers, with one gallon of proof spirit of wine. Five pints are distilled off. It is added to juleps, mixtures, and draughts, to give them a colour and agreeable flavor; and is used for making the *Sp. Lavendulae compositus*, Ph. Lond. into which enter spirit of lavender three pints, spirit of rosemary one pint, bruised cinnamon and nutmeg, each half an ounce, red Saunders one ounce. These are digested together for ten days and strained. The *Sp. Lavendulae compositus*, Ph. Ed. consists of the same ingredients, (but in different proportions) with the addition of cloves; and is the most aromatic of the two. Dose of either from twenty drops to a couple of drachms. The *Essential Oil*, commonly called oil of spike, is sometimes added to stimulating liniments, which it serves to perfume, at the same time that it communicates some degree of activity according to the proportion in which it is added.

¶ *MARANTA Galanga*. Monandria Monogynia. Scitamineæ. China and the Philippine Isles. (*Galanga*. Radix.) The root of this vegetable possesses

possesses a considerable degree of aromatic pungency, and has sometimes proved serviceable in languor and debility of the stomach, flatulent colic, and paralytic affections of the tongue and œsophagus. But for these, or any other medicinal purposes, it does not appear to be preferable to zedoary; and some other bitterish-aromatic drugs belonging to this class. Dose from ten grains to one scruple.

¶ *MELALEUCA Leucadendron*. Polyadelphia Polyandria. Hesperideæ. Arbor. Molucca Isles. (Cajeputa. Oleum Volatile.) The oil distilled from the leaves of this tree, and known by the name of Cajeput oil, has of late years been recommended in cases of epilepsy and hysteria, internally; and in rheumatic affections, externally. Dose from one to five or six drops. As an internal medicine, it is doubtful whether it be preferable to the oleum rorismarini and other essential oils; and as an external remedy, the oleum terebinthinæ, or a combination of camphor with olive oil and oleum lavendulæ, will be found to answer equally well. *Thunberg* on Cajeput Oil, in the Swedish Transactions for 1781.

MELISSA officinalis. Didynamia Gymnospermia. Verticillatæ. Southern parts of Europe in Alpine situations. Cultivated abundantly in most parts of Europe. (Herba.) Balm. Lightly aromatic.

The infusion of the leaves is a common beverage in febrile affections; to which, however, pure water or toast and water is often better suited.

MENTHA piperita. Didynamia Gymnospermia. Verticillatæ. Indigenous (*Mentha piperitis.* Herba.) Peppermint. An infusion of the leaves, or the water distilled from them (*Aqua Menthæ piperitidis*, Ph. Lond. *Aqua Menthæ piperitæ*, Ph. Ed.) afford immediate relief in vomitings from too great irritability of the stomach, and in flatulency, &c. The dose of the distilled water is from half an ounce to one ounce, or an ounce and a half. The *Spiritus Menthæ piperitidis*, Ph. Lond. is made by distilling one pound and a half of dried peppermint with a gallon of proof spirit of wine, and water sufficient to prevent empyreuma. A gallon is distilled off. Dose from half a drachm to one drachm. The *Oleum Essentiale Menthæ piperitidis*, Ph. Lond. *Oleum Volatile Menthæ piperitæ*, Ph. Ed. is a common and useful addition to cathartic bolusses and pills, to prevent griping. Dose from one to three or four drops.

MENTHA viridis. Class and order as above. Indigenous. (*Mentha sativa.* Herba.) Spearmint. Of similar medicinal virtues, but in a much weaker degree, with the preceding species. The preparations from it are the same; namely, a distilled

tilled water, spirit and oil. The spearmint water (*Aqua Menthae sativæ*, Ph. Lond.) is a common vehicle for other medicines, and may be given in doses of two ounces or more. The spirit and oil (*Spiritus Menthae sativæ*, Ph. Lond. and *Oleum essentielle Menthae sativæ*, Ph. Lond.) are given in the same doses as the spirit and oil of the first mentioned species.

¶ *MENTHA Pulegium*. Class and order as of the last. Indigenous. (Pulegium, Herba. Flos.) Pennyroyal. Nearly equal to peppermint in aromatic pungency. The officinal preparations of this plant are the same with those of the two preceding species, and may be given in the same doses. An unnecessary article in the list of the materia medica.

MYRISTICA moschata. Monœcia Monandria. Oleraceæ. Arbor. Molucca Isles. (Myristica. Fructûs nucleus, *nux moschata* dictus. Oleum essentielle, Oleum expressum, *Oleum macis* vulgo dictum. Macis.) The nutmeg tree. The kernel of the fruit of this tree, known by the name of nutmeg, is a pleasant but strong aromatic, which is frequently added to other stomachic drugs in languor and debility of the digestive organs, in vomiting and diarrhœa; and in the advanced stage of dysentery. Like camphor it has a narcotic effect,

when administered too freely; hence *Dr. Cullen* has cautioned against its use in subjects disposed to apoplexy or palsy. Dose from five to fifteen grains. The *Spiritus Nuclei fructus Myristicæ*, Ph. Lond. (formerly *Aqua Nucis Moschatæ*) is made by distilling two ounces of bruised nutmegs in one gallon of proof spirit of wine, with water sufficient to prevent empyreuma. One gallon is distilled off. Dose from half a drachm to two drachms. The nutmeg is an ingredient in the *Sp. Raphani comp.* Ph. Lond.; in the *Sp. Lavend. comp.* Ph. Lond. et Ed. in the *Confectio aromatica*, Ph. Lond.; in the *Electuarium Mimosæ Catechu*, Ph. Ed. and in the *Pulvis Carbonatis Calcis compositus*, Ph. Ed. and *Trochisci Carbonatis Calcis*, Ph. Ed. The expressed oil of nutmegs, termed *Oleum Macis*, is used externally in stimulating liniments and plasters. It is one of the ingredients of the *Emplastrum Ladani compositum*, Ph. Lond. The membranous involucre of the kernel, termed Mace (*Macis*), possesses all the aromatic virtues of the kernel itself (nutmeg) but in a higher degree. Accordingly it is given in smaller doses. *Thunberg de Myristica moschata*, 1789.

MYROXYLON *Peruiferum*. Decandria Monogynia. Lomentaceæ. Arbor. South America. (*Balsamum Peruvianum*.) Balsam of Peru. Coincides in medicinal virtues with the Balsam of Copaiva,

paiva, (see p. 176, of this Vol.) except that it is more heating, and not laxative in the usual doses, as the copaiva is. Formerly much used by the surgeons as an ingredient in digestive ointments. The *Tinctura Balsami Peruviani*, Ph. Lond. is made by digesting, until the solution is completed, four ounces of Peruvian balsam, with one pint of rectified spirit of wine. Sometimes prescribed as an external application to stimulate and deterge foul and obstinate ulcers. The medicinal virtues of this and other balsams were greatly over-rated by *Hoffman*.

MYRTUS Pimenta. Icosandria Monogynia. Hesperideæ. Arbor. Jamaica. (Pimento. Piper Jamaicense.) Pimento. Jamaica Pepper. Allspice. This is a very pungent aromatic, and is prescribed in the same cases as cinnamon and nutmeg are, and in the same doses. The *Aqua Pimento*, Ph. Lond. (formerly *Aqua Piperis Jamaicensis*) is made by distilling half a pound of bruised pimento with water sufficient to prevent empyreuma; the pimento being previously macerated in the water for twenty-four hours. A gallon is distilled off. Similar to this is the *Aqua Fructus Myrti Pimenta*, Ph. Ed. Dose of either from one to two ounces. The *Spiritus Pimento*, Ph. Lond. is made by distilling two ounces of bruised pimento-berries with one gallon of proof spirit of wine, and
water

water sufficient to prevent empyreuma. One gallon is distilled off. Dose from one drachm to half an ounce. The *Sp. Fructus Myrti Pimentæ*, Ph. Ed. is made by distilling half a pound of bruised pimento with nine pounds of diluted alcohol, and water enough to prevent burning; the pimento being previously macerated with the alcohol, in a close vessel for the space of two days. Nine pounds are distilled off. This is considerably stronger than the London preparation. Dose from half a drachm to two drachms. In the Edinburgh pharmacopœia there is an essential oil of pimento; (*Oleum Volatile Myrti Pimentæ*) of which the dose is one or two drops.

ORIGANUM vulgare. Didynamia Gymnospermia. Verticillatæ. Indigenous. (Herba.) Wild Marjoram. This plant abounds in a hot pungent essential oil (*Oleum essentielle origiani*, Ph. Lond.) coinciding in medicinal virtues with the ol. rorismarini, ol. lauri, and other aromatic oils. Like the last mentioned oils, it is chiefly used externally as an ingredient in stimulating liniments and embrocations.

¶ **ORIGANUM Majorana.** Class and order as of the preceding. Southern parts of Europe. (Majorana. Herba.) Sweet Marjoram. Coincides in medicinal virtues with the *origanum vulgare*; but

but by cultivation, its aromatic qualities are impaired. It cannot be necessary to retain both species in the list of the materia medica.

PANAX *Quinquifolium*. (See p. 125, of this Vol.) Ginseng. For observations on the medicinal uses of this drug, see the page above referred to, under the class of TONICS.

¶ PASTINACA *Opopanax*. (See p. 295, Vol. I.) Opopanax. For observations on the medicinal uses of this gum-resin the reader is referred to the class of EMMENAGOGUES.

PIMPINELLA *Anisum*. Pentandria Digynia. Umbellatæ. Syria and Egypt. (Anisum. Semen.) Aniseeds are an agreeable aromatic, used in the same cases and in the same doses as carraway seeds, which see. The officinal preparations are an essential oil and a compound spirit. (*Spiritus Anisi compositus*, Ph. Lond.) This last is made by distilling bruised aniseeds and bruised angelica seeds, each half a pound, with proof spirit of wine one gallon, and water sufficient to prevent empyreuma. One gallon is distilled off. Dose one or two drachms.

PINUS *Abies*. Monœcia Polyandria. (Monœcia Adelpia.) Coniferæ. Europe and North America. Arbor. Spruce Fir. From this tree
are

are obtained the *Pix burgundica*, (Burgundy pitch) and *Thus*, (common frankincense.) The former is the basis of the *Emplastrum Picis Burgundicæ comp.* Ph. Lond. This plaster is applied over the part affected in obstinate rheumatic affections, and between the shoulders, in coughs of long standing, in asthmas, and in cases of incipient phthisis pulmonalis. Frankincense (*Thus*) is an ingredient in various stimulant plasters.

PINUS Balsamea. Class and order as above. Arbor. Canada. (*Balsamum Canadense.*) Balsam of Canada. Agrees in medicinal properties with common turpentine, which see.

PINUS Larix. (See Vol. I. p. 203 and 228.) The Larch. The medical uses of turpentine (*terebinthina*) oil of turpentine, *resina flava*, and other preparations from this tree have been already noticed in Vol. I. at the pages above referred to. It belongs, however, to this place to mention that the *oleum terebinthinæ* has been recommended by some practitioners as a remedy against the sciatica or hip-gout. Dose fifteen or twenty drops, mixed up with honey (*Tesaur. Medicam.* p. 222.)

PINUS sylvestris. (See Vol. I. p. 229.) The Scotch Fir. An account of the medicinal operation

tion of tar (*Pix liquida. Resina empyreumatica*) will be found at the place above referred to. The *Unguentum Picis*, Ph. Lond. is composed of equal parts tar and mutton suet. In the *Unguentum Picis*, Ph. Ed. the proportions are five parts of tar to two parts of yellow wax. These ointments are a common application in cases of *tinea capitis*.

¶ *PIPER Cubeba.* Diandria Trigynia. Piperitæ. Java. (Cubeba.) Cubebs. Applicable to the same purposes as the following species of pepper, which surpasses the cubeba in aromatic potency, and consequently render it a superfluous article in the list of the materia medica.

PIPER longum. Class and order as above. East Indies. (Fructus.) Long pepper. This is one of the hottest and most stimulating aromatics, being only surpassed in pungency by the capsicum. As such it is given in cases of gouty dyspepsia, and other atonic conditions of the stomach, joined with bitters, absorbents, opiates, and other medicines. It is sometimes prescribed in paralytic affections, and is occasionally added to the cinchona in obstinate agues. Dose from five to ten grains. It is a principal ingredient in the *Pulvis Aromaticus*, Ph. Lond. (formerly *Species Aromaticæ*) which consists of cinnamon two parts, lesser cardamom, ginger, and long pepper, each one part. Dose from
five

five to fifteen grains. Long pepper also enters into the composition of the *Pulvis Cretæ compositus*, Ph. Lond. (See p. 32, of this Vol.) Of the *Confectio Opiata*, Ph. Lond. and of the *Tinctura Cinnamomi composita*, Ph. Lond. et Ed. (formerly called *Tinctura Aromatica*) for which see p. 183, of this Vol.

PIPER nigrum. Class and order as before. East Indies. (Bacca vel Fructus.) Black and white Pepper. May be given in the same cases and in the same doses with the last mentioned species. Respecting the uses of pepper as a condiment, as well as for some remarks on the effects of these highly stimulating aromatics on different constitutions, see Vol. I. pp. 92 and 93.

PISTACIA Lentiscus. (See Vol. I. p. 116.) Mastich. This resin is seldom used for any other purpose than as a masticatory, to stimulate the tongue and fauces in paralytic affections of those parts. But in these cases, ginger or pellitory of Spain will generally answer better. Hence we are disposed to consider mastich as a superfluous article of the materia medica.

PISTACIA Terebinthus. Class and order as of the last. Arbor. Asia, Africa, Isle of Chios, &c. (Terebinthina Chia.) The liquid resin of this tree,

tree, called chian turpentine, coincides in chemical and medicinal properties with common turpentine, already noticed at p. 194, of this Vol. and at pp. 203 and 228 of Vol. I.

PTEROCARPUS Draco. Sanguis Draconis. (See p. 79 of this Vol.) Dragon's blood. The medical uses of this resinous substance have been already mentioned at the place above referred to.

RHODODENDRON Chrysanthum. (See p. 257, of Vol. I.) Rhododendrum. Decoctions of the leaves and twigs of this shrub have been given with good effect in gouty affections, and in cases of chronic rheumatism. The doses have been already specified under the class of DIAPHORETICS.

RHUS Toxicodendron. Pentandria Trigynia. Dumosæ. Frutex. North America. (Folia.) Poison Oak. The dried leaves of this shrub, in doses of half a grain or one grain three times a day, have produced considerable benefit in some cases of palsy. *Alderson's Essay*, 1794.

ROSMARINUS officinalis. (See pp. 112 and 295, Vol. I.) Rosemary. Infusions of this herb joined with valerian, arnica, &c. are sometimes prescribed in cases of palsy. Other medical uses of rosemary have been mentioned at the place above referred to.

The

The officinal preparations of this aromatic herb, are the *Oleum essentielle Rorismarini*, Ph. Ed. *Oleum Volatile Rorismarini*, Ph. Ed. and the *Spiritus Rorismarini*, Ph. Lond. et Ed. both obtained by distillation in the usual manner. The doses of the oil and spirit are the same as the doses of other essential oils and aromatic spirits. The principal use of both the one and the other is in liniments, embrocations, and other external applications against fixed local pains and paralytic affections.

SAGAPENUM. (Gummi-resina.) Sagapenum.
See EMMENAGOGUES.

SALVIA *officinalis*. (See p. 85, of this Vol.) Sage.

SINAPIS *nigra et alba*. (See Vol. I. pp. 178 and 231.) Common Mustard and White Mustard. Infusions of the bruised seeds alone, or joined with other stimulating vegetables, (Thesaur. Med. p. 228,) have often proved serviceable in cases of palsy; in which disorder, also, an embrocation made by infusing the farina of the seeds in vinegar, has been employed with advantage. The *Cataplasma Sinapeos*, Ph. Lond. is composed of equal parts pulverized mustard-seed and crumb of bread, moistened with a sufficient quantity of vinegar. This preparation, usually called a sinapism, is applied to the soles of the feet in sinking stage of fevers and other

other diseases. The *Oleum Sinapeos*, Ph. Lond. obtained by expression from the seeds, is a preparation that may well be dispensed with. For other medicinal uses of the seeds of this plant, see the volume above referred to, under the class of DIURETICS.

STYRAX *Benzoe*. (See Vol. I. pp. 159 and 160.) Benzoin. The medical uses and officinal preparations of benzoin have been already noticed at the places above referred to.

¶ STYRAX *officinalis*. (Ibid. p. 160.) Storax. A superfluous article in the list of the materia medica.

TOLUIFERA *Balsamum*. (Ibid. p. 161.) Balsam of Tolu. May be used in the same cases and in the same doses as the balsam of Peru, which see. The other officinal preparation of balsam of Tolu, besides those specified at the place above referred to, is the *Tinctura Balsami Tolutani*, Ph. Lond. made by digesting, until the solution is completed, one ounce and a half of balsam of Tolu in one pint of rectified spirit of wine. The *Tinctura Toluiferæ Balsami*, Ph. Ed. is made by digesting, until the solution is completed, one ounce and a half of balsam of Tolu in one pound of alcohol. Dose of either tincture, as an internal medicine, from half a

drachm to one drachm. Applied externally to old ulcers, carious bones, &c. The balsam of Tolu also enters into the composition of the *Tinctura Benzoës composita*, Ph. Lond. et Ed.

URTICA dioica. Monæcia Tetrandria. Scabridæ. Indigenous. (Herba.) The Stinging Nettle. In some paralytic cases the use of muscular action has been restored by means of urtication, or stinging with nettles.

VALERIANA officinalis. Wild Valerian. See ANTISPASMODICS.

WINTERANA aromatica. Polyandria Polygynia. Oleraceæ. Arbor. South America. (Winteranus Cortex.) Winter's bark. This is suited to the same cases as the cascarilla, canella alba, zedoary, and other stomachic vegetable substances already described. Dose from ten grains to one scruple.

PETROLEUM, Bitumen Petroleum. (Petroleum Barbadense.) Rock Oil. Barbadoes Tar. Chiefly used externally in paralytic and rheumatic cases. For the *Oleum Petrolei*, Ph. Lond. see ANTISPASMODICS.

ÆTHER vitriolicus, Ph. Lond. *Æther sulphuricus*,

ricus, Ph. Ed. Vitriolic Æther. Sulphuric Æther. There is some difference in the processes for obtaining æther, as directed by the London and Edinburgh colleges, which it will be proper to specify. The *Æther vitriolicus*, Ph. Lond. is made by distilling spirit of vitriolic æther, (which preparation has been described at p. 43 of this Vol.) two pounds, with water of pure kali, one ounce. They are previously shaken together, after which fourteen ounces, by measure, of æther are distilled off with a gentle heat. The *Æther Sulphuricus*, Ph. Ed. is made first by distilling together in a sand bath, of a proper degree of heat, sulphuric acid (vitriolic acid) and alkohol, (rectified spirit of wine) each thirty-two ounces, the distillation being continued until sixteen ounces of liquor have passed into the receiver, kept cool by water or snow. To the product thus obtained are added two drachms of potass (pure kali;) and it is again distilled in a very tall retort, with a very gentle heat, until ten ounces of liquid have passed into the receiver, kept cool during the whole of the process. The product thus obtained is the sulphuric æther. This remarkable chemical product, æther, is given with advantage in various diseases, both acute and chronic, where a powerfully diffusible stimulus is required; such as asthma, hysteria, hemicrania, typhus-fever, &c. In these cases it is combined with distilled aromatic waters with spirit of ammonia, with bitters, with

the Peruvian bark, and with opiates. Dose from thirty drops to one drachm. *Spiritus Ætheris Vitriolici compositus*, Ph. Lond. *Æther Sulphuricus cum Alkohole*, Ph. Ed. See ANTISPASMODICS.

CEREVISIA. *Malt Liquor.* The different species of malt liquor have been already enumerated at p. 102, Vol. I. Of these the *cerevisia nigra Londinensis* (London Porter) is often resorted to with advantage in cases of typhus-fever, where its use is not forbidden by the occurrence of diarrhœa.

VINUM. *Wine.* Respecting the use of wine and of vinous liquors, such as cyder and perry, in low and malignant fevers, in the ulcerated sore throat, in gangrene, &c. see p. 62, of this Vol. under the class of ANTISEPTICS. There is a propensity in modern practitioners to prescribe wine too soon and too copiously in the treatment of typhus. In such cases its administration should be regulated by the circumstances pointed out in the *Thesaur. Medicaminum*, p. 231. During its use, it is important that the alvine excretion be duly attended to.

SPIRITUS VINI. Alcohol. (See Vol. I. p. 105.) Spirit of Wine. Alcohol. Spirit of Wine, diluted with water, proves a powerful cordial, to which it is sometimes useful to resort, in cases of gouty dyspepsia and chronic diarrhœa; in the advanced and sinking

sinking stage of typhus-fever, &c. See p. 63, of this Vol. under the class of ANTISEPTICS. Spirit of Wine is used externally in stimulating and antiseptic fomentations, embrocations, collyriums, and gargles.

(3) *From the Mineral Kingdom.*

FERRUM, *ejusque præparata*. Iron and its preparations. See TONICS and EMMENAGOGUES.

AQUA *calida*. Hot water, taken in small quantities, and in as high a temperature as the mouth will well bear, during or after meals, is an excellent stimulus to the stomach in cases of cephalalgia, gouty languor, and dyspepsy; to the hepatic system in cases of jaundice and obstructed biliary secretion; and to the uterine system in cases of chlorosis, and amenorrhœa, when owing to diminished arterial action. See *Saunders* on the Aqueous Regimen in his Treatise on Mineral Waters.

THERMÆ *Bathonienses*. The Bath Waters. The stimulant powers of these mineral waters, so eminently serviceable in a variety of diseases connected with torpor and debility, may be referred to their chalybeate impregnation and high degree of temperature, jointly. Hence their use in gouty dyspepsia,

pepsia, jaundice, chlorosis, amenorrhœa, palsy, lead-colic, &c. See *Falconer* on the Medicinal Effects of the Bath Waters, 1798, and *Gibbes's* Second Treatise on the Bath Waters, 1803.

BALNEUM calidum. The Hot Bath. Immersion of the body in water heated to the temperature of 98 or 100 of Fahrenheit, has a powerfully stimulant effect upon the circulating and nervous system. Hence its use in various disordered conditions of the human constitution, connected with languid and debilitated action of the stomach, bowels, and skin. Hence too, its use in gouty and rheumatic stiffnesses and immobility of the joints; in ischiadic affections, as well as white swellings of the knee; and in various species of palsy. The hot salt water bath, and the Bath water bath, are more stimulating than a fresh water bath of the same temperature, and consequently more efficacious in some of the disorders abovementioned. The degree of stimulus communicated by the hot bath is proportionate to the degree of temperature and the length of time during which the body remains immersed in it. These must be varied according to the nature of the disorder for which this remedy is employed; for the regulation of which the treatises hereafter quoted should be consulted. We shall only remark, that in general, the higher degrees of temperature are best suited to paralytic cases. See the Treatises of *Falconer*,

coner, Saunders, and Gibbes, already quoted. See also Vol. I. p. 279, of this Synopsis.

BALNEUM Vaporis. The Vapor Bath. Applicable to the same cases as the common hot water bath; but deemed by some practitioners to be more efficacious in nodosities of the joints and paralytic affections. See Vol. I. p. 279.

GAS oxygenium. Oxygenium. (See p. 149, of this Vol.) Oxygen gas. The inhalation of this gas has been found beneficial in some cases of palsy; and promises to be an efficacious remedy in cases of apparent death from drowning, and other kinds of suffocation. Dr. Odier, of Geneva, recommends the use of water impregnated with oxygen gas, in atonic conditions of the primæ viæ, and in cases of hysteria, asthma, &c.

ELECTRISATIO. Electrization. Drawing electrical sparks from the joints when stiffened by chronic rheumatism, and from the limbs in cases of palsy, or communicating gentle shocks of electricity to the affected parts, have, in numerous instances produced a very beneficial effect. Also in gutta serena and cataract; and in deafness. Both these modes of using the electrical machine have moreover been resorted to with great success in cases of amenorrhœa. See Vol. I. p. 303, under

EMMENAGOGUES. To the treatises there referred to on electricity, add the following: *Gardane sur l'Électricité Medicale*, 1768. *Mauduyt des Malades, qui ont été électrisés*, 1785. *Wilkinson on Medical Electricity*, 1799. *Kühn über d. Med. Electrizarität*, 1797, in the Third Volume of *Duncan's Annals of Medicine*. Also *De Haen Ratio Medendi*, Tom. I. Cap. viii.

GALVANISATIO. *Galvanization*. Applicable to the same cases as electricity. *Wilkinson's Elements of Galvanism*, 1804. *Carpue Introduction to Electricity and Galvanism, with Cases showing their Effects in the Cure of Diseases*, 1803. *Meade's Outlines of the Origin and Progress of Galvanism, with its Application to Medicine*, 1805.

TABULAR

TABULAR VIEW
OF
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CLASS IX.

ANTISPASMODICS.

ALL those substances, which, whether introduced into the body or applied to its surface, have been found by experience to put a stop to convulsive movements or rigid contractions of the muscular fibres, are termed Antispasmodics. Of these substances there are many which differ from each other very widely both in respect of sensible qualities and chemical composition; which, indeed, is not surprising, when it is considered that spasmodic affections occur in various and even opposite states of the body; a circumstance which calls for nice discrimination on the part of the practitioner in the use of these remedies. Some of them being considerably stimulant in their operation, aggravate rather than alleviate spasm, when associated with plethora or obstruction. It is therefore of great importance to attend carefully to the state of the patient's body, previously to the exhibition of these medicines; to premise and accompany their use in epilepsy, chorea and hysteria, by proper evacuations; and to select from the great variety of articles which this class contains, such as are best adapted to the particular form of spasm which it is our business to cure.

(1) *From*

(1) *From the Animal Kingdom.*

AMMONIA, ejusque præparata. Ammonia or Volatile Alkali and its preparations. See p. 241, Vol. I. Also p. 24, and p. 155, of this Vol.

OLEUM animale, Ph. Lond. *Animal Oil*. Dippel's Oil. Prepared by three times distilling oil of hartshorn. Has been given with advantage in some cases of hysteria and epilepsy. It has been recommended in hydrophobia. Given before the expected attack of an intermittent, it has, like opium, had the effect either of shortening and mitigating the paroxysm, or of wholly preventing it. Dose from ten to twenty or thirty drops. *Dippel Vitæ animalis Morbus et Medicina*, 1711. *Vater de Virtutibus Olei Animalis*, 1725. *Haller de Præparatione Olei Animalis, ejusque Ufu in Febrilibus Intermittentibus Medendis*, 1748.

CASTOR *Fiber*. Mammalia. Glires, Linn. Mammalia Rodentia. Cuvier. Europe. North America. (*Castoreum Russicum, materia, in folliculo prope anum sito, collecta.*) The Beaver, Castor. The substance contained in the follicle situated near the anus. This odoriferous substance, (says *Dr. Cullen*) is certainly on many occasions a powerful antispasmodic, and has been useful almost
in

in every case requiring such remedies, especially when given in substance, and in large doses from ten to thirty grains. It has been supposed (he adds) by some to have somewhat of a narcotic power; but he had never perceived this, excepting where such effects might be imputed to its removing the spasmodic affections which interrupted sleep. *Sydenham* used to prescribe it (but in doses too small) joined with sal succini, in hysteria; and *Whytt* and others in the same cases, combined with opium. *Morris* thought it serviceable in some cases of whooping cough, when given in conjunction with the Peruvian bark. It has been recommended in epilepsy by some foreign practitioners; but there are few cases of the last mentioned disorder in which castor is likely to be of permanent utility. The *Tinctura Castorei*, Ph. Lond. is made by digesting for ten days, two ounces of Russian castor in two pints of proof spirit of wine. The *Tinctura Castorei*, Ph. Ed. is made by digesting one ounce and a half of Russian castor in one pound of alcohol, for seven days. Dose of either from thirty to sixty drops. The *Tinctura Castorei composita*, Ph. Ed. is made by digesting for seven days, Russian castor one ounce, and assafoetida half an ounce, in ammoniated alcohol one pound. This is a powerful antispasmodic. Dose from twenty to thirty or forty drops. It is certain that in many of the disorders here mentioned, opium joined with camphor, ol. succini

succini, ammonia, æther, and other antispasmodics, affords equal relief.

Moschus moschiferus. Mammalia Pecora. Tibet. (Moschus, materia in folliculo, prope umbilicum sito, collecta.) The Musk Animal. Musk is the substance which is contained in the follicle situated near the navel. This odoriferous substance is a still more powerful antispasmodic than the preceding. It has been given with marked success in cases of hysteria, gouty spasms of the stomach (*Pringle*) hooping-cough, (*Whytt* and *De Berger*) tetanus, (*Huck Saunders*) and hydrophobia, (*Johnstone*;) also in hiccup, subsultus tendinum and delirium of typhoid fever, (*Wall.*) It has also been thought to be serviceable in epilepsy and mania; but in the last mentioned cases, the propriety of exhibiting it is very questionable. This drug is, as *Dr. Cullen* has remarked, more effectual when given in substance than under any preparation that has been attempted. He states that the dose to adults should be from ten to thirty grains; and that even when these large doses are found to be effectual, they must be repeated after no long intervals, till the disease is entirely overcome. It is joined with the volatile alkali, camphor, opium, æther, essential oils, &c. The most convenient form is that of a bolus, (*Thesaur. Med.* p. 248.) To children, and in cases of difficult deglutition, it has been administered

nistered clysterwise, with advantage, (*Thesaur. Med.* p. 257. The *Mistura Moschata*, Ph. Lond. (formerly *Julepum e Moscho*) is composed of musk two scruples, gum arabic and white sugar each one drachm, rose-water six ounces. Dose from one to two ounces every second or third hour. *Reinik Momenta quædam de Moscho*, 1784. *Tralles de limitandis Laudibus Moschi*, 1783.

(2) *From the Vegetable Kingdom.*

ATROPA *Belladonna*. Deadly Nightshade. See NARCOTICS.

BUBON *Galbanum*. (See p. 289, Vol. I. and p. 169, of this Vol.) *Galbanum*. Used as an antispasmodic in the same cases and in the same doses as *assafœtida*, which see.

CALLICOCCA *Ipecacuanha*. Brotero. *Cephaelis Ipecacuanha*. Willdenow. Pentandria Monogynia. Aggregatæ. South America. (*Ipecacuanha*. Radix.) *Ipecacuanha*. Given in minute doses, namely from half a grain to one or two grains, this root has been found to operate beneficially as a spasmodic, in cases of asthma, hooping-cough, and uterine hemorrhage. Respecting the other medical uses of *ipecacuanha*, as well as for an account of its various

various officinal preparations, the reader is referred to Vol. I. under EMETICS and DIAPHORETICS.

CARDAMINE *pratensis*. Tetradynamia Siliquosa. Siliquosæ. Indigenous. (Cardamine. Flos.) Lady-smock. Recommended by Sir G. Baker in chorea and other convulsive affections. Dose of the dried flowers from half a drachm to one drachm. These flowers may have proved serviceable with some practitioners in epilepsy; but in a very bad case of that disorder (in which, indeed, various other antispasmodics had been in vain resorted to) the writer of this Synopsis did not find the cardamine to be of any avail, although it was administered in very considerable doses.

CINCHONA *officinalis*. (See p. 100, of this Vol.) Peruvian bark. The use of this drug in hysteria, chorea, epilepsy, &c. has been already noticed under the class of TONICS. When administered in these cases, the cinchona is frequently joined with valerian, (*Thesaur. Med.* p. 251,) castor, camphor, or ammonia.

¶ CITRUS *Aurantium*. (See p. 112, of this Vol.) The Orange tree. Several foreign writers have recommended the dried leaves of this tree in epilepsy and other convulsive disorders; but it would appear that they have greatly over-rated their antispasmodic

antispasmodic powers. *Tissot* effected a cure in some instances of simple convulsion by this medicine, but he never experienced much benefit from it in epilepsies. *De Haen* (*Ratio Medendi*, Tom. II. p. 223,) was disappointed in his attempts to cure epileptic patients with this remedy, although in some other convulsive affections it afforded considerable relief. *Dr. Cullen* states that the few trials he had made with these leaves in such cases, were without success. Their sensible qualities (he observes) are bitter and aromatic; but in both these respects weaker than in the orange peel, and there is nothing in them that could lead him to expect any specific virtue. Dose of the dried leaves from fifteen grains to two scruples. Given also in the form of a decoction, in the proportion of one ounce of the leaves to a pint of water (*Thesaur. Med.* p. 255.)

CONIUM maculatum. (*Cicuta*.) Hemlock. See NARCOTICS.

FERULA assafœtida. (See Vol. I. p. 145.) *Assafœtida*. This gum resin is a common and useful remedy in cases of hysteria, flatulent colic, and tympanites. It has also been prescribed, and seemingly with advantage in some cases of whooping-cough, (where the disease has been of several weeks duration) and croup. In the true spasmodic asthma it is of little efficacy, but in what is termed the pituitous

tous or humoral asthma, it affords considerable relief by promoting expectoration. Some writers have mentioned it as a remedy against epilepsy; but it is too stimulant in its operation to be recommended in that disorder. Dose from ten to thirty grains. On many occasions, it is advantageously combined with opium, galbanum, castor, ammonia, and æther. *Dr. Cullen* has well remarked that where assafoetida is to be employed as an antispasmodic, the form of a tincture or volatile spirit is the most proper. In flatulent colic and some other cases, it is often administered clysterwise (*Thesaur. Med.* p. 257.) It is also applied externally in the form of a plaster to the stomach or umbilical region in cases of gouty flatulency and hysteria. Of the various officinal preparations of this drug and their doses, mention has been made in Vol. I. under the classes EXPECTORANTS and EMMENAGOGUES.

HYOSCYAMUS niger. Black Henbane. See NARCOTICS.

LAURUS Camphora. (See Vol. I. p. 251.) Camphor. Large doses of this drug have been prescribed by some practitioners (*Thesaur. Med.* p. 251,) in maniacal affections, and as it seemed, with some relief. The reports, however, respecting its favourable operation in such disorders, are not yet

sufficiently numerous and varied to warrant a principal reliance upon it as an antimaniacal medicine. It is usefully joined in cases of hysteria and gout with other more powerful antispasmodic remedies.

PAPAYER *somniferum*. The White Poppy. See NARCOTICS.

¶ RUTA *graveolens*. (See Vol. I. p. 297.) Rue. This strong smelling herb and its preparations, were frequently prescribed by Sydenham, in hysterical affections, but in modern practice, little use is made of this herb, for the reason, that there are so many other articles belonging to this class, which surpass it in efficacy. It is an ingredient in the *Pulvis Myrrhæ compositus*, Ph. Lond. (See EMMENAGOGUES, Vol. I. p. 293.) The *Extractum Rutæ*, Ph. Lond. et Ed. (Ibid. p. 298,) is given in the cases abovementioned, in doses of ten to twenty grains.

VALERIANA *officinalis*. Triandria Monogynia. Aggregatæ. Indigenous. (Valeriana Sylvestris. Radix.) Wild Valerian. The root of this plant is with good reason ranked among the most powerful of the vegetable antispasmodics. It has been found particularly efficacious in epilepsy; in which cases it should be prescribed in substance, and in large

large doses, i. e. about two drachms twice or thrice in twenty-four hours ; or the powder may be given in half this quantity, mixed with two ounces of its own infusion. On many occasions it is advantageously joined with the Peruvian bark (*Thesaur. Med.* p. 251.) The volatile alkali is an useful addition to it in cases of hysteria and hemicrania. The *Tinctura Valerianæ*, Ph. Lond. is made by digesting for eight days, in a gentle heat, four ounces of Valerian root in two pints of proof spirit of wine. Dose two drachms. The *Tinctura Valerianæ ammoniata*, Ph. Lond. (formerly *Tinct. Valer. Volatilis*) is made by digesting for the same space of time the same proportion of Valerian root in two pints of the compound spirit of ammonia. Dose from half a drachm to one drachm. *Marchant* Experiences sur les Vertus de la grande Valeriane sauvage, in the *Histoire de l'Acad. Roy. des Sciences*, année, 1706. *Tissot* in his *Traité de l'Epilepsie*, 1770. *Dresky* de *Valeriana officinali*, 1776, and reprinted in *Baldinger's Sylloge*, Vol. III. 1778.

KALI præparatum. Alkali Vegetabile fixum. Prepared Kali. Fixed Vegetable Alkali. Useful in convulsive affections connected with acidity of the primæ viæ, as noticed at p. 27, of this Vol. under **ABSORBENTS.**

(2) *From the Mineral Kingdom.*

SUCCINUM. Amber. Respecting this bituminous substance, *Dr. Cullen* has well observed, that in its crude state it is totally insoluble in the juices of the stomach, and has always appeared to him to be absolutely inert when given in that way, as recommended by some old writers on the materia medica. And with regard to the tinctures prepared from it in the manner described in several foreign pharmacopœias, the quantity of amber with which they are impregnated, is so very inconsiderable, that whatever antispasmodic effects those tinctures may have produced, should be referred, he thinks, rather to the different menstrua (alkohol and æthereal spirits) employed for the solution of the amber, than to the amber itself. The preparations from amber in our pharmacopœias, are *Sal Succini*, Ph. Lond. *Acidum Succini*, Ph. Ed. and *Oleum Succini*, Ph. Lond. et. Ed. These products are obtained by distilling amber in a sand bath, with a fire gradually increased. The salt (acid) is afterwards purified (*Sal Succini purificatus*, Ph. Lond.) by solution in boiling water and crystallization. Of the salt or crystallized acid, the dose is from five to fifteen grains. It is seldom met with genuine, and whatever benefit in any cases of hysteria or other nervous

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vous affections may have followed its use, we are disposed to refer to the empyreumatic oil, which is never entirely separated from it in the ordinary mode of purification. On the whole we are disposed to consider the *sal vel acidum succini* as a preparation which may well be dispensed with. Of all the preparations of amber, the oil is doubtless the best; and when rectified by repeated distillations (*Oleum Succini rectificatum*, Ph. Lond. *Oleum Succini purissimum*, Ph. Ed.) Dr. Cullen relates that he had found it useful in many cases of epilepsy, hysteria, and other spasmodic affections. It may be doubted, however, whether in such cases, it possesses any advantages over the rectified oil of hartshorn, termed animal oil. Dose of the oil of amber, from ten to thirty drops. The *Spiritus Ammoniae Succinatus*, Ph. Lond. (Eau de Luce) is composed of alcohol one ounce by weight, water of pure ammonia four ounces by measure, rectified oil of amber one scruple by weight, soap ten grains. The soap and oil of amber are digested with the alcohol until they are dissolved; after which the water of pure ammonia is added and mixed by shaking the whole together. This is used both internally and externally; internally in doses of ten or fifteen drops, in cases of hysteria, gouty affections of the stomach, tetanus, &c.; and to persons bitten by venomous serpents; and externally in the accidents last mentioned, as well as in palsy. It is also used for

smelling to in cases of deliquium. *Hartmann* de Succini in Medicina efficacia, 1710. *Alberti* de Succino, 1750.

NATRON *præparatum*. Ph. Lond. Carbonas Sodæ, Ph. Ed. (Alkali minerale) Prepared Natron. Carbonate of Soda. Mineral Alkali. This alkaline salt joined with small doses of opium has lately been given with remarkable success in cases of whooping cough. The proportions for a child one year old, two grains of carbonate of soda and one drop of tincture of opium, with five drops of ipecacuanha wine, given every fourth hour. *Edinburgh Medical and Surgical Journal*, Vol. II. No. 7. Of the other medicinal properties of this alkaline salt, mention has been made at p. 240, Vol. I. and at p. 34, of this Volume.

ÆTHER *vitriolicus*, Ph. Lond. Æther *sulphuricus*, Ph. Ed. Vitriolic Æther. Sulphuric Æther. This is advantageously joined in the usual doses (See STIMULANTS) with the tincture of assafoetida, or tincture of castor, in hysterical affections. It is, moreover, an useful addition to opium and musk in the subfultus tendinum, hiccup, and low delirium of typhus; also in the vomiting which occurs in the yellow fever; but it affords no relief against spasms which accompany attacks of the gout.

SPIRITUS

SPIRITUS Ætheris Vitriolici compositus, Ph. Lond.
Compound Spirit of Vitriolic Æther, (which is made by mixing together two pounds of spirit of vitriolic æther and three drachms of oil of wine) may be given in the same cases and in the same doses.

BISMUTHI oxydum album. Magisterium Bismuthi. White Oxyd of Bismuth. Magistery of Bismuth. Of late years this metallic oxyd has been given with good effect by *Dr. Odier*, of Geneva, and some other foreign practitioners, in cases of dyspepsia arising from increased irritability of the stomach, as well as in hysteria; but *Dr. Odier* never found it useful in epilepsy and other forms of convulsion; nor in dyspeptic affections of the stomach connected with diseases of the viscera. During its exhibition the belly is sometimes constipated, sometimes relaxed. Dose from four to twelve grains, three or four times a day. After all, is this metallic oxyd preferable to the oxyd of zinc, in any of the disorders which are said to have been relieved by it? *Odier Manuel de Medecine Pratique*, 1805. See also *Carminati Opuscula Therapeutica*.

¶ *CUPRI Ammoniaretum*, Ph. Ed. (formerly *Cuprum Ammoniacum*) Ammoniaret of Copper. Ammoniacal Copper. According to the formula of the Edinburgh College, this is made by taking

Q 4

purified

purified sulphate of copper two parts, carbonate of ammonia three parts; these are rubbed well together in a glass mortar, [during which an effervescence takes place] until they unite into a violet-coloured mass, which, after being wrapped up in blotting paper, is first dried on a chalk-stone, and then by a gentle heat, after which it is put into a glass bottle closely stopped and kept for use. On the authority of the late *Dr. Cullen*, who first recommended this preparation to the notice of medical practitioners, it continues to be prescribed by some physicians in epileptic cases. Dose from half a grain to four or five grains twice a day (*Thesaur. Med.* p. 186.) We would remark, however, that in large doses it disturbs the stomach too much to admit of its continuance for a sufficient length of time, and that in small doses it affords but a slight and temporary relief. As the preparations of zinc are more manageable, and at least equally efficacious, they may at all times supersede, for internal purposes, the cupri ammoniaretum and every other preparation of copper. The *Pilulæ Ammoniaretæ Cupri*, Ph. Ed. (formerly *Pilulæ Cupri*) consist of ammoniaret of copper sixteen grains, crumb of bread four scruples, water of carbonate of ammonia enough to form a mass to be divided into thirty-two pills. Supposing the ammoniaret of copper to be equally distributed throughout the mass, and that all the pills are of an equal bulk, each pill will contain

tain half a grain of the cupreous salt. Dose one pill twice a day at first, then two, then three, gradually increasing the number to as many as the epileptic patient's stomach will bear. The *Aqua Cupri Ammoniati*, Ph. Lond. (formerly *Aqua Sapphirina*) has been already noticed at p. 66, of this Vol. under the class of ANTISEPTICS. It is only used as an outward application.

¶ *CUPRUM vitriolatum*, Ph. Lond. *Sulphas Cupri*, Ph. Ed. (*Vitriolum Cœruleum*) *Vitriolated Copper*. *Sulphate of Copper*. (*Blue Vitriol*.) Some practitioners have employed this preparation of copper for the cure of hysteria, flatulent colic, and epilepsy, in doses of a quarter or half a grain, repeated twice or thrice in the space of twenty-four hours. For these purposes, however, as well as for the cure of intermittents, (*Thesaur. Med.* p. 190,) it will always be safer and more advisable to employ the sulphate of zinc. We cannot, whenever an occasion presents itself, refrain from objecting to the use internally, of every preparation of copper.

HYDRARGYRUS, ejusque præparata. *Quicksilver* and its preparations. See Vol. I. p. 117—137, under *SIALAGOGUES*, where mention is made of the use of this metal, and its various preparations, in tetanus, hydrophobia, and other spasmodic disorders.

Mercurial

Mercurial inunction has been resorted to with similar advantage in the same cases.

ZINCUM calcinatum. Ph. Lond. Oxydum Zinci, Ph. Ed. (Flores Zinci) Calcined Zinc. Oxyd of Zinc. (Flowers of Zinc.) Obtained by burning zinc in a crucible subjected to a red heat, having another crucible inverted over it, but so as to give free access to the air. During its combustion the zinc is oxydized and converted into exceedingly light, white flakes, commonly called flowers of zinc. They were administered with great success, in epilepsy and other convulsive affections, upwards of thirty years ago, by *Gaubius*, who derived his knowledge of their antispasmodic virtues from an empiric of Amsterdam. In consequence of his recommendation of this oxyd, many foreign practitioners were induced to make trial of it, and their report is, generally, in its favor. Among our own countrymen, who have employed this remedy with advantage in epileptic cases, may be mentioned *Drs. Percival* and *Haygarth*. Others have found the oxyd of zinc useful in cases of hysteria, chorea, asthma, hooping-cough, (*Duncan's Med. Comm.* Vol. V. Part 2,) and tetanus. But if there are many who bear testimony to the remedial powers of the oxyd of zinc in the disorders abovementioned, there are, on the other hand, not a few who complain that they have derived only a very slight
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and transitory relief from it; and some there are who state, that its exhibition was productive of no relief at all. This is the fate with most medicines; the successful administration of which depends upon a variety of circumstances; such as, whether the disorder be recent or inveterate; whether simple or complicated with much visceral affection; whether the administration of the remedy be premised and accompanied by the requisite evacuations; and lastly, whether it be prescribed in the proper doses, and continued for a sufficient length of time. Inattention to any of the circumstances here enumerated, would be followed by a partial or total failure of the medicine employed. For these reasons we should be cautious in condemning a remedy so long as the negative cases do not greatly outnumber the positive and undisputed instances produced in its favor. Dose to children, from a quarter to half a grain, three or four times a day; to adults, from two to ten grains, three or four times a day. It may be given either in the form of powder or of pills (*Tkefaur. Med.* p. 187.) *Hart de Zinco, ejusque Florum Ufu Medico*, 1772. *Hartman super Florum Zinci Ufu Interno*, 1778.

ZINCUM vitriolatum, Ph. Lond. *Sulphas Zinci*, Ph. Ed. (See p. 148, of this Vol.) *Vitriolated Zinc*. *Sulphate of Zinc*. This is prescribed in the same spasmodic affections as the oxyd of zinc,
and

and in many instances with the same good effect. Dose from one to three or four grains. For other observations on the medical uses of the sulphate of zinc, see ASTRINGENTS and TONICS.

ELECTRISATIO. *Electrization.* According to the statements of some practitioners, electricity has been resorted to with advantage in epilepsy, catalepsy, and other spasmodic disorders. In the first mentioned disorder, however, it is a stimulus which, we apprehend, will more frequently prove injurious than useful. For other observations on the medical powers of electricity, see STIMULANTS.

TABULAR

TABULAR VIEW
OF
THE CONTENTS OF CLASS X.

NARCOTICS.

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<i>Monkshood.</i>		<i>Laurus Camphora.</i>	<i>Camphor.</i>
<i>Atropa Belladonna.</i>	<i>Deadly</i>	<i>Nicotiana Tabacum.</i>	<i>To-</i>
<i>Nightshade.</i>		<i>bacco.</i>	
<i>Conium maculatum.</i>	<i>Hemlock.</i>	<i>Papaver somniferum.</i>	<i>White</i>
<i>Datura Stramonium.</i>	<i>Thorn-</i>	<i>Poppy.</i>	
<i>apple.</i>			

CLASS

CLASS X.

NARCOTICS.

THERE is no class of medicines in the administration of which more judgment and discrimination are requisite than in the administration of those which are termed Narcotics. When given in full doses, much good or much mischief is sure to follow, according as they are properly or mistakingly prescribed. What a common practice it is to give them whenever a patient complains of pain, without duly investigating the cause of that pain? Whether it be the consequence of high inflammatory action, of a plethoric condition, or of a suppression of some periodical or habitual discharge? In these cases to prescribe any of the medicines belonging to this class, in a full or considerable dose, before the remedies suited to remove inflammation, plethora, and obstruction had been resorted to, would only serve to aggravate the disease. And even where there is no condition of the body which contra-indicates the use of Narcotics, it is of great importance to adapt the doses not only to the age and constitution of the patients, but likewise to the particular form of disease. For instance, in tetanus, hemicrania, and colica pictonum, opium, and
other

other narcotic medicines may be given in large doses with excellent effect; but in phthisis pulmonalis, typhus-fever, and some other states of debility, small doses, repeated at proper intervals, are found to answer best.

In the administration of opium and other narcotics, it is moreover proper to consider whether in the particular case in which they appear to be indicated, they should be prescribed alone, or in combination with other medicines: and if in the manner last mentioned, with what sort of adjuncts. Thus, in cases of synochus, acute rheumatism, and the early stage of dysentery, they should be given in combination with calomel and antimonials; in cases of asthma and phthisis pulmonalis, with ammoniacum, squill, and other expectorants; in cases of cholera, with diluents and demulcents; in cases of diarrhoea, with astringents and aromatics; in hæmorrhagic cases, with sulphate of zinc and other styptics; in hysteria, with the volatile alkali, æther, and fœtids; in convulsive affections, especially such as occur in children, with magnesia, and other absorbents.

ACONITUM *Napellus*. Aconitum *Neomontanum*.
Aconitum *Cammarum*. (See Vol. I. p. 244.)
Monkshood. Wolfsbane. All these species of aconite have been used with advantage in cases of
arthritis,

arthritis, venereal nodes, &c. They abate pain and promote perspiration. See DIAPHORETICS in the Vol. above referred to, where the doses and preparations are mentioned. The *Succus Spissatus Aconiti Napelli*, Ph. Ed. is prepared by evaporating the expressed juice of the plant in a water-bath, saturated with sea-salt, to the consistence of honey. Dose, at first half a grain gradually increased to five or ten grains, or as much as the patient can bear, without producing any disagreeable effect. Previously to entering upon the use of the aconite, the primæ viæ should be duly cleansed.

ATROPA *Belladonna*. Pentandria Monogynia. Solanacæ. Indigenous. (*Solanum lethale*. Radix. Folia.) Deadly Night-shade. All the parts of this plant, root, leaves, and berries, are narcotic. The root and leaves commonly produce a diaphoretic as well as an anodyne effect; but like the fox-glove, tobacco, and some other narcotics, the deadly night-shade not unfrequently operates as a diuretic. Sometimes it purges; and in a few instances (*Greding apud Ludwigi Adversar. Medico-Pract. Vol. I. Part 4, and Vol. II. Part 2,*) it has been known to produce a salivation. The root has been cried up as a specific against the hydrophobia, both as a preservative and curative remedy; but in this instance we fear its powers have been greatly over-rated. The leaves have been employed

ployed with good effect in epilepsy, chorea, and other convulsive disorders (*Bergius* and *Greding*) as well as in palsy and mania. Also, in cancerous affections, (*Lambergen* apud *Halleri* Disp. ad Hist. et Curationem Morb. Tom. II,) both internally and externally. In relating his experience of this remedy in the cases last mentioned, *Dr. Cullen* observes that he had a cancer of the lip entirely cured by it; a scirrhusity in a woman's breast, of such a kind as frequently proceeds to a cancer, he had found entirely dissolved by the use of it; a sore a little below the eye, which had put on a cancerous appearance, was much mended by the internal use of the balladonna; but the patient having learned somewhat of the poisonous nature of this medicine, refused to continue the use of it, upon which the sore again spread and was painful; but upon a return to the use of the balladonna, was again mended to a considerable degree; when the same fears again returning, the use of it was again laid aside, and with the same consequence of the sores becoming worse. Of these alternate states of amendment and relapse, connected with the alternate use and abstinence from the balladonna, there were several repetitions which fell under his own observation; but the patient being removed to a great distance, he did not know how long those changes went on; but he was very well convinced of the power and virtues of this herb in certain cases. At the same time

he owned, that in several cases, both of scirrhoty and of open sores, it had not answered his expectations. *De Haen* relates that he gave this herb to four women affected with scirrhus and cancerous breasts. At first it seemed to afford some relief; but by continuation, the contrary effect was produced. One of the patients sunk under the profuse discharge, not of ichor but of pus; in the other three patients the use of the belladonna was continued until the loss of appetite, diarrhoea, vertigo, and extreme languor, made it necessary to desist. *Dr. Cullen* mentions an instance of a person who, while using the infusion of the leaves, with the effect of nearly healing up a cancer of the lip, had a dryness and stricture of the pharynx and adjoining parts of the œsophagus come on to a great degree, and was suddenly killed by a very copious throwing up of blood, seemingly as he was informed, proceeding from the fauces.

The beneficial effects of the belladonna in the convulsive affections before mentioned, as well as in paralysis and mania, may be referred partly to the power which, in common with other narcotics, it possesses of allaying irritation, and partly to its sudorific action. In such cases with a view to promote its operation by the skin, it will generally be proper to direct the patients to be kept moderately warm, (but by no means in a high temperature) and

and to cause them to dilute sufficiently with aqueous liquors, taken in a tepid state.

A medicine capable of producing such powerful effects, demands the utmost caution on the part of the prescriber. He should begin with the smallest doses, increasing them very gradually to a double, triple, or quadruple quantity (in which cases the intervals between the repetitions of the doses should be proportionably lengthened) and desisting as soon as a dryness or stricture of the throat, or much diarrhoea, or great languor, with sickness and vomiting, or vertigo, and dimness of sight come on.

Either the dried root or dried leaves may be used. The former is prescribed to children, according to their age, in doses of half a grain to three or four grains; to adults from six to twelve grains. Of the dried leaves (which are more commonly used than the root) the dose is from half a grain to ten grains. In some cases, rhubarb and other aperients are usefully joined with this medicine. *Lambergen* (See *Halleri* Disputationes above referred to) employed a watery infusion; but the proportion of water which he used is very vaguely expressed, when he says, that he steeped for the space of a night, one scruple of the dried leaves in ten tea-cups full of boiling water. Of this he gave the tenth part, i. e. one tea-cup full for a dose. The *Succus spissatus*

Atropæ Belladonnæ, Ph. Ed. is made in the same manner as the inspissated juice of aconite. Dose from one to five grains. *Timmerman* Periculum Medicum Belladonnæ, 1761. *Davies* de Atropa Belladonna, 1776, and reprinted in *Baldinger's* Sylloge. Four treatises by *Münch* the father and his two sons, published in 1781, 1783, and 1785, of which treatises two are in German and two in Latin.

CONIUM maculatum. Pentandria Digynia. Umbellatæ. Indigenous. (Cicuta. Herba. Flos. Semen.) Hemlock. Practitioners being more familiarized with the use of this plant than with that of the preceding and some other narcotic vegetables, it will not be necessary to enter so particularly into an account of its medical virtues.

It has been chiefly employed in scrophulous and cancerous disorders, both internally and externally, and in many of these cases, with considerable benefit; in other instances, without any sensible relief, even after being continued for a great length of time. Like most proposers of new remedies, *Stoerck* has been too profuse in his encomiums of hemlock. It has been found useful in chronic rheumatism, and some cases of gout, where opium disagreed, and in that acutely painful complaint termed tic douloureux; (*Fothergill*) also in caries of

of the bones (*Justamond*) and bad venereal ulcerations (*John Hunter*.) *Dr. Butter* prescribed it with marked success in the whooping-cough; and being less stimulant than opium, and less liable to check expectoration, it generally answers better than the inspissated juice of the poppy, in cases of phthisis pulmonalis. The *Succus Cicutæ spissatus*, Ph. Lond. and *Succus Conii maculati*, Ph. Ed. are both prepared in the same manner as the inspissated juice of the belladonna before mentioned. Dose of either from one to ten grains. *Stoerk's* hemlock pills consist of the inspissated juice formed into a mass with a sufficient quantity of the dried leaves. This mass is divided into pills, each weighing two grains. (*Thesaur. Med.* p. 264.) The dried leaves may be given alone in doses of five to fifteen grains. With the inspissated juice and powder are joined, according to the nature of the disorder in which they are given, calomel, guaiacum, ammoniacum, &c. In the administration of this, as of all other narcotic medicines, it is proper to begin with the smallest doses, afterwards gradually increasing them to as much as the patients can well bear. In this manner many instances are recorded where astonishing quantities of hemlock have been taken, in cancerous and other painful disorders, without disturbing the constitution. It is a sign that the medicine has been pushed to its utmost length, when it disorders the head, stomach, or bowels. For external use,

fomentations, cataplasms, and plasters, (*Theaur. Med.* p. 272,) are prepared from this vegetable. *Stoerck* Libellus de *Cicuta*, 1760. *Ejusdem* Libellus Secundus de *Cicuta*, 1761.

DATURA *Stramonium*. Pentandria Monogynia. Solanaceæ. Indigenous. (Herba.) Thornapple. This powerfully narcotic vegetable has been administered with good effect in epileptic and maniacal cases, according to the reports of *Stoerck*, *Odbelius*, *Bergius*, and others. The preparation usually given, is the inspissated juice. Dose from one quarter to two or three grains. In the administration of this remedy, the same caution is requisite which we have pointed out in the instance of the belladonna. It is a sign that the dose has been carried to its height, whenever vertigo, dilatation of the pupils, head-ach, drowsiness or difficulty of swallowing come on. Under such circumstances its exhibition should be suspended for a time, and when again resorted to, the dose should be diminished. *Stoerck* Libellus de *Stramonio*, *Hyoscyamo* et *Aconito*, 1762. *Wedenberg* de *Stramonii* Ufu in *Morbis Convulsivis*, 1772, and reprinted in *Baldinger's* Sylloge, Vol. II.

DIGITALIS *purpurea*. (See Vol. I. p. 224.) Foxglove. It belongs to this place to take notice of the use of this remedy in cases accompanied with great irritability and increased frequency of

the pulse, such as scrophula, phthisis, hæmoptoe, spasmodic asthma, palpitation of the heart, &c. In these cases it is prescribed either in the form of a powder or tincture, in the doses already mentioned in the volume above referred to; and according to the particular kind of disorder in which it is prescribed, it is joined with opiates, expectorants, antispasmodics, &c. (*Thesaur. Med.* p. 271.) The *Tinctura Digitalis Purpureæ*, Ph. Ed. is made by digesting for seven days one ounce of the dried leaves of the foxglove, in eight ounces of diluted alcohol. Dose from ten to twenty drops. This is not so strong as *Darwin's* Tincture, mentioned at p. 226, Vol. I. Respecting the use of this herb in hydropic affections, see DIURETICS. *Beddoes's* Treatises on Scrophula and Pulmonary Consumption, and *Ferriar's* Essay on the *Digitalis purpurea*.

HYOSCYAMUS *niger*. Pentandria Monogynia. Solanaceæ. Indigenous. (Herba. Semen.) Henbane. Wherever an anodyne is wanted, and opium disagrees, this herb, and the preparations from it, may be prescribed. It is especially suited to spasmodic and colicky affections, and to cases of chronic rheumatism and arthritis. Instances are also recorded of its beneficial effects in mania and melancholy; but in the last mentioned disorders, it has at least as often failed as it has succeeded, and is, on the whole, a doubtful remedy in diseases belonging to the class

of Vefaniæ. It does not occasion costiveness, as opium does. The officinal preparations are the *Succus Spiffatus Hyofcyami nigri*, Ph. Ed. made in the same manner as the inspissated juice of aconite, hemlock, &c. Dose from one grain to fifteen or twenty grains. In the last mentioned doses, it frequently occasions headach, vertigo, vomiting and diarrhoea. When any of these effects are produced, it should be immediately discontinued. The *Tinctura Hyofcyami nigri*, Ph. Ed. is made by digesting for seven days one ounce of the dried leaves of henbane in eight ounces of diluted alcohol. Dose from ten to thirty or forty drops. The leaves are applied in the form of a cataplasm to scirrhus tumors and cancerous sores. We cannot refrain from repeating the remark thrown out in the *Thesaur. Med.* p. 262, that this plant possesses medicinal virtues which entitle it to a place in every modern pharmacopœia. *Stoerck de Stramonio, Hyofcyamo, &c.* 1762.

LAURUS Camphora. (See Vol. I. p. 251.) Camphor. When given in large doses, this medicinal substance operates as a narcotic, and has been successfully prescribed by some practitioners in maniacal disorders, in which cases it may be combined with tartarised antimony, nitre, and other refrigerants. It is however less to be relied upon than many other articles belonging to this class. *Locker Observa-*
tiones

tiones Practicæ circa Luem Veneream, Epilepsiam et Maniam 1762.

NICOTIANA Tabacum. (See Vol. I. pp. 151 and 227.) Tobacco. As an anodyne and antispasmodic, the infusion or tincture of this herb is sometimes prescribed in cases of dysury. (Fowler as quoted at p. 228, Vol. I.) The *Vinum Nicotianæ Tabaci*, Ph. Ed. is made by macerating for seven days one ounce of tobacco in one pound of Spanish white wine. Dose from fifteen to fifty or sixty drops. Respecting the uses of tobacco in asthmatic and hydropic affections, see EXPECTORANTS and DIURETICS.

PAPAVER somniferum. Polyandria Monogynia. Rhæades. Asia. Cultivated in Europe. (Papaver album. Capsula, ejusque succus spissatus *Opium* dictus.) White Poppy. The capsule, or head, and its inspissated juice called Opium.

Of all the articles belonging to the class of narcotics, Opium is that which is most extensively useful. It would be contrary to the plan of this work, professedly practical, to enter into a rationale of its operation upon the animal body. Waving, therefore, all inquiry of that kind, we shall proceed 1^o to point out those diseases in which it is decidedly beneficial, with the mode of exhibition best suited

suitcd to each; 2° those diseases in which its utility is doubtful; 3° those in which it is manifestly hurtful; 4° the different preparations and doses.

1°. It is decidedly useful in the following cases: (a) in various painful affections, (b) in many spasmodic disorders, (c) in profuse evacuations from the *primæ viæ* and other passages, (d) in some forms of pulmonary disease, (e) in the irritability and watchfulness which occur in some states of fever, (f) in some exanthematous diseases, (g) in the irritative and ulcerative action of the scrophulous, cancerous and venereal virus, (h) in gangrene of the extremities, arising from defective energy in the vascular system.

(a) Among the painful affections in which opium is prescribed with advantage, may be mentioned rheumatism and arthritis; cephalalgia; gastrodynia; flatulent colic, and head-ache; jaundice; stone and gravel; difficult parturition. In some of these cases, its exhibition should be premised or accompanied by evacuations suited to each form of disease; for example, by diaphoretics in rheumatic and arthritic cases, (See *Pulv. Ipecac. compos.*); by cathartics and deobstruents in colic and jaundice; and by alkaline diuretics in cases of stone and gravel. In some of these cases opium is administered per anum as well as by the mouth.

(b) To

(b) To the list of spasmodic affections in which opium is eminently serviceable, belong hysteria, chorea, tetanus, hydrophobia, hiccup, asthma, hooping-cough, and the convulsions of children. In some of these cases, and especially in tetanus and hydrophobia, it is employed in very large doses.

(c) Opium is a very useful and efficacious remedy in profuse evacuations from the primæ viæ, and other passages; such as cholera, diarrhœa, and the advanced stage of dysentery; colliquative perspirations, and diabetes. In the first of these disorders it is joined with diluents, in diarrhœa with tonics and absorbents, in dysentery with laxatives and amylaceous substances, and in profuse perspirations and diabetes with extracts and decoctions of the astringent barks.

(d) The forms of pulmonary disease in which opium affords relief, are, besides convulsive asthma, and hooping cough, mentioned above in section (b) catarrh, &c. (but not in the very beginning of inflammatory catarrh) and phthisis pulmonalis. In the last-mentioned cases it is given in moderate doses, (large doses being hurtful) and is joined with expectorants, demulcents, and refrigerants.

(e) The irritability and watchfulness which occur in some states of fever, are admirably counteracted by

by opium, given under proper regulations; namely, after due evacuations by the *primæ viæ* and pores of the skin, and where the watchfulness is not the consequence of an overloaded or inflammatory condition of the vessels of the brain. In these cases it is usual to direct the opiate to be taken at night in a full dose, combined with diaphoretics, where the skin is hot and dry; or if there be great debility, without such a condition of the skin, with cordials and aromatics. In intermittent fevers, the best effects have been produced by the exhibition of opiates in full doses, either just before the expected return of the paroxysm, or during the hot fit, (*Lind, Duchanoy, Trotter, Clarke*). When employed merely to counteract debility in typhus-fever, opiates should be administered in small doses, frequently repeated.

(f) In some exanthematous diseases, such as small pox (especially the confluent small pox) and measles. In the first of these diseases, *Sydenham* frequently prescribed it during the eruptive fever; but unless convulsions occur, it will generally be better to omit the use of this narcotic in that early stage of the disorder; afterwards it proves very serviceable in allaying restlessness, and in promoting the maturation of the pustules, when they do not rise well, especially when they are of the confluent sort. With regard to the employment of opiates in the measles, so long as pneumonic inflammation in any considerable

derable degree accompanies this exanthema, their use is improper; but when no such condition of the respiratory organs is present, they may be prescribed with the best effect for the purpose of allaying the cough, and counteracting restlessness. In the last-mentioned disorder, (the measles) they are joined with demulcents and diaphoretics.

(g) Opium proves an useful remedy where the system is disordered by the irritative and ulcerative action of the scrophulous, cancerous, and venereal virus. In scrophula it is joined with deobstruents and the bark, and with mercurial medicines, in venereal cases.

(h) In gangrene of the extremities, arising from defective energy of the vascular system, frequently occurring in persons far advanced in years, opium has been found to have a most beneficial operation. In these cases it should be administered very freely, namely, one grain every fourth hour.

2°. Among the diseases in which opium is a doubtful remedy, may be mentioned hæmorrhages, epilepsy, mania, and melancholia. In hæmorrhages, especially from the lungs, which are accompanied with much pyrexia, and increased action of the sanguiferous system, it is seldom that opiates are of real service; though many practitioners are in
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the habit of prescribing them with little hesitation in such cases. It is otherwise with hæmorrhages from the uterus, especially in cases of abortion and parturition, in which there is always more or less of pain, irritation, and spasm. By alleviating these symptoms, opium restrains the hæmorrhage. Opiates are very commonly given to epileptic patients, under the idea of allaying irritation, and because they are productive of the best effects in ordinary convulsions. But this mode of reasoning is extremely fallacious; and if opium has proved beneficial in some instances of epilepsy, it has most assuredly had no salutary effect, but a contrary one, in a greater number of instances. The same remark will apply to the employment of this remedy in maniacal affections, in which some modern practitioners have ventured to give it in very large doses. We do not find that this practice has succeeded with many who have had the best opportunities of deciding upon it, and therefore in cases of mania and melancholia we consider opium as a remedy of doubtful operation.

3°. It remains to point out the morbid conditions in which opium is manifestly hurtful. Among these may be mentioned the early stage of inflammatory disorders; and plethora, general or partial. If, in such cases, opium be given before bleeding and other evacuating remedies have been resorted to,
all

all the morbid symptoms are thereby aggravated.

4°. HAVING thus enumerated the various diseases in which opium is useful, as well as those in which it is of doubtful and hurtful operation, we now proceed to give an account of its different preparations. It will be proper, however, previously to mention that the medium dose of opium is one grain; and that when it is administered clysterwise, double the quantity given by the mouth may usually be given per anum. When employed in the manner last mentioned, mucilaginous and amylaceous substances are joined with it. (*Thesaur. Med.* p. 274.) During the use of opiates, costiveness should be prevented by proper laxatives; and where its exhibition at night is followed by nausea and anorexia the next morning, it should be combined with aromatics, provided the use of these last be not contra-indicated.

OPIMUM *purificatum*, Ph. Lond. (formerly Extractum Thebaïcum) is prepared by dissolving, with a gentle heat, opium in proof spirit of wine, filtrating the solution through paper, and afterwards reducing the solution to a proper consistence, by distilling off the spirit. This purified opium is kept under two forms; namely, under the form of a soft extract (*opium purificatum molle*) proper for
being

being made into pills ; and of a hard extract (*opium purificatum durum*) proper for being rubbed into a powder. Dose to adults, about one grain more or less according to the nature of the disorder. Concerning this mode of purifying opium, it has been remarked by some pharmaceutical writers, that it is robbed of some of its volatile parts by digestion and subsequent distillation with the vinous spirit ; and that moreover the undissolved matter, which is left on the filtre, is not altogether an inert or refuse substance, but possesses some degree of narcotic virtue. Hence this purified opium is considered by some physicians as opium altered and impaired ; and accordingly they prefer the crude or unpurified opium which, in equal doses, they find to have a less heating, and more steadily hypnotic effect. In the Ed. pharmacopœia there is a watery extract of opium, prepared from poppy-heads, and termed *Extractum Capiti Papaveris somniferi*. Dose one or two grains. *Pilulæ Opii*, Ph. Lond. consist of purified opium two parts, extract of liquorice eight parts. Dose five grains. *Pilulæ Opiatæ*, Ph. Ed. (formerly *Pilulæ Thebaïcæ*) consist of opium one part, extract of liquorice seven parts, pimento two parts. Dose four or five grains.

The *Trochisci Glycyrrhizæ cum Opio*, Ph. Ed. have been already described at p. 12. of this Vol. under DEMULCENTS. *Confectio Opiatâ*, Ph. Lond. (formerly

merly *Philonium Londinense*) consists of hard purified opium six drams, long pepper, ginger, and caraway seeds, each two ounces, syrup of the white poppy, boiled down to the consistence of honey, three times the weight of all the other ingredients. The purified opium is first added to the syrup made hot, and then the aromatics previously rubbed into a powder. Dose from fifteen grains to half a drachm. *Electuarium opiatum*, Ph. Ed. (formerly *Electuarium Thebaïcum*) consists of aromatic powder six ounces, pulverised serpentaria-root three ounces, opium diffused in a sufficient quantity of Spanish white wine half an ounce, syrup of ginger, one pound. Dose from one to two scruples. *Electuarium Mimosæ Catechu*, Ph. Ed. (formerly *Confectio Japonica*) See p. 76. of this Vol. under ASTRINGENTS. *Pulvis opiatu*s, Ph. Lond. consists of hard purified opium one part, burnt hartshorn nine parts. Dose from five to fifteen grains. *Pulvis opiatu*s, Ph. Ed. consists of opium one part, prepared carbonate of lime (chalk) nine parts. Dose the same as of the preceding. *Pulvis Cretæ compositus cum Opio*, Ph. Lond. See p. 32. of this Volume, under ABSORBENTS. *Pulvis Ipecacuanhæ compositus*, Ph. Lond. *Pulv. Ipecac. et Opii*, Ph. Ed. see p. 177. Vol. I. *Syrupus Papaveris albi*, Ph. Lond. (formerly *Syrupus e Meconio*) is prepared in the following manner: Take dried white poppy heads three pounds and a half, purified sugar six pounds, distilled water eight
VOL. II. S gallons.

gallons. The poppy-heads being cut into pieces and bruised, the water is added to them and boiled down to three gallons in a water bath, saturated with sea salt. The decoction is then pressed out, and after being reduced by evaporation to about four pints, it is filtered boiling hot, first through a sieve, and afterwards through fine flannel. It is then put by to settle for twelve hours; after which the liquor is poured off from the sediment, and boiled down to three pints, when the sugar is dissolved in it, so as to form a syrup. The *Syrupus Papaveris somniferi*, Ph. Ed. is prepared from white poppy heads, dried and freed from the seeds, two pounds, boiling water thirty pounds, double-refined sugar four pounds. The sliced capsules, or heads, are first macerated in the water for twelve hours; after which the liquor is kept boiling until only a third part of it remains; the decoction is then strongly pressed out. It is then filtered and reduced by boiling to half the quantity, when it is again filtered. The sugar being then added, it is boiled a little while, so as to form a syrup. Dose of either of these syrups, from half a drachm to two drachms to young persons, and from two drachms to half an ounce to adults. It is very rarely, we fear, that the necessary pains are bestowed in preparing these syrups, which are consequently of very uncertain strength, and, as opiates, little to be depended upon. By such long and repeated boilings, the virtues of the drug are altered and impaired.

Moreover,

Moreover, if these syrups be ever so well prepared, they are extremely liable to ferment, especially in warm weather, by which means their narcotic power is considerably weakened. For these reasons, it will generally answer better to prescribe in their stead a given quantity of tincture of opium, with a suitable proportion of simple syrup, or of syrup of marsh mallows. *Tinctura Opii*, Ph. Lond. (in place of what was formerly termed *Tinctura Thebaica*) is made by digesting, for ten days, ten drachms of hard purified opium in one pint of proof spirit of wine. Medium dose, about twenty drops, equivalent to one grain of the solid opium. *Tinctura Opii* five *Tinctura Thebaica*, Ph. Ed. (commonly called Liquid Laudanum) is made by digesting, for seven days, two ounces of opium in two pounds of diluted alcohol. Dose fifteen or twenty drops. Although the proportions of opium, in these two tinctures, are different, yet as in the one, in which the proportion is less, the hard purified opium is used, and in the other, in which the proportion is greater, crude opium; they are, upon the whole, nearly of an equal strength, a given measure of each yielding, on evaporation, nearly the same quantities of residuum. As these tinctures, when given in full doses the over night, occasion, in numerous instances, more or less of headach and nausea the next day; practitioners have endeavoured to prevent such disagreeable effects, by adding to these preparations

various substances, which they deemed to be correctives. Thus *Sydenham's* liquid laudanum was a solution of opium and saffron in Spanish white wine, aromatized with cinnamon and cloves: And the spices last mentioned were ingredients in the *tinctura thebaica* of the older editions of the London pharmacopœia. Although the simple solution of opium in proof spirit of wine (diluted alcohol) is certainly better adapted, by being less stimulant, to the majority of cases in which opiates are prescribed; yet, on the other hand, as by combining this narcotic with the spices before mentioned, headach, nausea, and languor, are in a great measure prevented; we think it would be desirable that there should be two officinal tinctures of opium; namely, the simple tincture, as now prepared, still bearing the title of *tinctura opii*, and a compound tincture, impregnated with cinnamon and cloves, to be denominated *tinctura opii aromatica*. Some have been fond of preparing what they term concentrated tinctures of opium, one drop of which they represent to be equivalent to four or five drops of the officinal tinctures. But whatever may be the degree of saturation to which those tinctures may be brought at the time they are prepared, it is certain that, by keeping, they deposit a considerable quantity of the opium which was diffused or suspended in them; so that, after a time, they come to be of a very indeterminate strength. And even if they always continued

continued to be as concentrated as when first prepared, this very circumstance would be a strong objection against them; as it might too easily happen, that a drop or two more than was intended might escape from the phial in the compounder's hand, which might be productive of the most mischievous consequences, especially in the case of infants, or very young subjects. Again, for patients of the description last mentioned, a quantity of the saturated tincture less than that which is equivalent to four drops of the officinal tincture, that is less than a single drop (but how is the drop to be divided?) will often be as much as should be prescribed. We have seen the inconveniences of such concentrated preparations, by whatever name they may be called, and conceive it to be our duty, in the strongest manner possible, to discourage their use. *Tinctura Opii Camphorata*, Ph. Lond. (in place of what was formerly called Elixir Paregoricum) consists of hard purified opium, and flowers of benzoin, each one drachm, camphor two scruples, oil of aniseed one drachm, proof spirit of wine two pints, digested for ten days. Dose from half a drachm to two drachms. *Tinctura Opii Ammoniata*, Ph. Ed. (formerly Elixir Paregoricum) consists of benzoic acid and saffron, each three drachms, opium two drachms, oil of aniseed half a drachm, ammoniated alcohol sixteen ounces digested in a close vessel for seven days, and strained through paper. This preparation differs

very widely from the preceding, the menstruum being ammoniated alkohol (spirit of ammonia) instead of the diluted vinous spirit, and the proportion of opium to the menstruum being four times greater, without any camphor. Dose from thirty drops to one drachm. Both the one and the other are frequently prescribed in coughs, catarrhs and asthmatic affections, *Tinctura Saponis et Opii*, Ph. Ed. (formerly *Linimentum Anodynum*) is made by adding to two pounds of the *tinctura saponis* (formerly called *Linimentum saponaceum*) one ounce of opium. Rubbed on the affected part in rheumatic pains of the joints, in sprains, &c. For formulæ of opiate plasters and opiate clysters, see *Thesaur Med.* pp. 273. 274. *Wedel* Opiologia, 1674. *Willis* de Medicamentis Opiatis, in his *Pharmaceutice Rationalis*. *Hoffman* de Opii Correctione et Usu, 1702. *Young's* Treatise on Opium, 1753. *Tralles* Usus Opii Salubris et Noxius in Morborum Medela, four Vols. 4to. 1774—1784. *Murray* Appàratus Medicaminum, second Vol. *Cullen's* Mat. Med. second Vol. *Woodville's* Medical Botany, third Vol.

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OF
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<i>Tanacetum vulgare.</i>	<i>Tansy.</i>
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<i>Convolvulus Scammonia.</i>	
<i>Scammony.</i>	(2) <i>From the Mineral Kingdom.</i>
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<i>gyri,</i>	<i>Ph. Ed.</i>
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<i>silver.</i>	
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† <i>Spigelia Marilandica.</i>	<i>Carolina Pink.</i>
<i>Iron and its preparation.</i>	
<i>Stannum.</i>	<i>Tin.</i>

CLASS XI.

ANTHELMINTICS.

OF the medicines which belong to this class, some destroy the different species of worms which breed in the alimentary canal, by their chemical, others by their mechanical action upon those animals; but by far the greater number of anthelmintic or vermifuge medicines operate in no other manner than as drastic purges, bringing away the morbid accumulation of slime from the intestines, and, with the slime, the worms which were lodged in it. After the worms have been brought away by these remedies, the bowels should be strengthened by bitters and other tonic medicines, and the use of green vegetables, or much garden stuff of any kind, and of malt liquor, should be forbidden.

(1) *From the Vegetable Kingdom.*

Artemisia Santonica. Syngenesia Polygamia superflua. Compositæ discoideæ. Asia. Africa. (Santonicum. Cina. Semen.) Wormseed. Ten or twenty grains, or more of the seeds of this plant are given in syrup or treacle to children troubled with worms, interposing

interposing a cathartic. *Cartheuser de Semine Santonico*, 1749.

Convolvulus Jalapa. (See Vol. I. 192.) *Jalap*. When employed as a vermifuge, it should be given in full doses, or if in medium doses joined with calomel, assisting its operation by solutions of vitriolated natron, or vitriolated magnesia. It may be given in the form of a powder, or of pills at bed time, and worked off the next morning with the saline cathartics just mentioned. *Jalap* exhibited in this manner in sufficient doses, and in combination with calomel, will commonly render it unnecessary to have recourse to any other vermifuge medicine.

Scammonia
Convolvulus ~~purpurea~~. (See Vol. I. p. 194.)
Scammony. Its use in worm cases has been already noticed under CATHARTICS.

Dolichos pruriens. *Diadelphia Decandria*. *Papilionaceæ*. West Indies. (*Stizolobium*. *Leguminis pubes rigida*.) Cowhage, or Cowitch. The stiff hairs on the pod. These hairs are mixed up with syrup or treacle, of which one, two, or three teaspoonfuls, according to the age of the patient, are given for a dose in the morning, upon an empty stomach, or night and morning. (*Thesaur. Med.* 284.) This remedy acts mechanically, and has been found to be very efficacious in most worm-cases, but particularly in cases of the lumbricus or round

round worm. For children from infancy to the age of six or eight, *Mr. Chamberlaine* says he has generally found a teaspoonful of the cowhage electuary to be a sufficient dose; from thence to fourteen, a dessert spoonful is found to answer well, and, for all above that age, a tablespoonful. Formerly he thought it might be sufficient if taken once a day; but experience had shewn him, that it answers better when taken twice; viz. at night going to bed, and in the morning an hour before breakfast; and though little or no previous medicine is necessary, yet (he remarks) it is generally found to operate more effectually where a gentle emetic (provided nothing forbids it) has been premised. He further observes that the cowhage after being begun upon, is to be continued for three or four days; after which some brisk purgative, such as jalap or infusion of senna, is to be taken; which will in general bring away the worms, if there be any. The cowhage is to be continued as long as there may seem occasion; repeating the purgative at intervals of three or four days. *Bancroft's Natural History of Guiana. Cochrane*, in the second Vol. of the Medical Commentaries. *Chamberlaine's Treatise on the Stizolobium or Cowhage.*

Ferula asafœtida. (See Vol. I. p. 291.) *Asafœtida.* Given both by the mouth and per anum: in worm cases, and particularly in cases of tapeworm. *Thesaur. Med.* pp. 287.

Geoffræa inermis. Diadelphia Decandria. Papilionaceæ. Jamaica (Cortex.) Cabbage-tree. Decoctions of the bark of this tree have been given by the West India practitioners with great success, in worm cases. It operates as a cathartic. The decoction is made by boiling an ounce of the bark in a quart of water until it is reduced to half a pint, and becomes of the colour of amber or Madeira wine. (*Thesaur. Med.* p. 286.) Of this strong decoction the dose to children is one table spoonful; to adults, four times that quantity. This bark may also be given in the form of a powder, in doses from five grains to a scruple, alone or joined with calomel or jalap; but the decoction commonly answers best. The extract is the least eligible of all the preparations of this vegetable. *Wright*, in the *Phil. Trans.* Vol. 67 *Bondt de Cortice Geoffrææ*, 1788.

¶ *Juglans regia.* Monœcia Polyandria. Amnataceæ. Cultivated in England. (Fructus immaturus. Putamen Nucum Juglandum.) The Walnut tree. An extract prepared from the green rind of the unripe fruit is given in worm-cases, in doses from ten to thirty grains. During the use of this medicine, a mercurial purge should be occasionally interposed. The powers of this extract, as an anthelmintic, are so greatly surpassed by most of the
other

other articles belonging to this class, that it may be well dispensed with.

Laurus Camphora. (See Vol. I. p. 251.) Camphor. Dissolved in oil, and administered glysterwise, camphor has been found useful in cases of ascariides. *Thesaur. Med.* p. 287.

Nicotiana Tabacum. (See Vol. I. p. 203.) Tobacco. The anthelmintic powers of the infusion of this herb, and of the smoke emitted from the leaves when burnt, have been already noticed in the volume above referred to, under CATHARTICS.

Olea Europæa. Diandria Monogynia. Sepiariæ. Southern parts of Europe. (Oliva. Fructus oleum expressum.) The Olive-tree. Olive oil given in doses from a teaspoonful to a table-spoonful to children and young persons twice a day, with the occasional interposition of a purge, has brought away worms in several instances. The late *Dr. Wall*, of Worcester, thought that spirit of ammonia added to the oil rendered it more efficacious. (Medical Tracts, page 90).

Polypodium Filix mas. Cryptogamia Filices. Indigenous. (Filix. Radix.) Male Fern. The manner of giving this remedy in cases of tapeworm is particularly described in the *Thesaur. Medicam.* p. 277. to which, in order to avoid repetition, the reader is referred.

¶ *Spigelia*

¶ *Spigelia Marilandica*. Pentandria Monogynia. Stellatæ. Carolina. (Radix.) Carolina pink. From ten to twenty grains of the root of this plant have been given twice a day to children between two and twelve years of age, when troubled with worms. It generally operates as a purgative; but when it does not produce this effect in a sufficient degree, proper doses of rhubarb, jalap, or calomel, should be given with it. As the spigelia may be easily overdosed, and in that case produces alarming symptoms, it should perhaps be erased from the catalogue of vermifuge-medicines, of which there is a sufficient number without it, that are at least equally efficacious, and much safer in their operation.

Stalagmitis Cambogioides. Polygamia Monœcia. Tricoccæ. Arbor. East-Indies. (Gambogia. Gummi-Gutta. Gummi-resina.) Gamboge. The anthelmintic powers of this gum-resin have been already noticed at p. 198. Vol. I. under CATHARTICS. Joined with calomel, it is remarkably efficacious against the tapeworm; and to these two remedies, and not to the root of the polypodium, is to be referred the success of *Nouffer's* method of cure in that species of worms.

Tanacetum vulgare. (See p. 130 of this Vol.) Tansey. The dried and pulverised flowering tops of this plant are given either alone or joined with the
seeds

seeds of the *artemisia santonica*, in doses of fifteen to thirty grains.

2 From the Mineral Kingdom.

Natron *murium*. Murias Sodæ, Ph. Ed. (Sal Marinum. Sal Commune. Sal culinare.) Muriated natron. Muriate of Soda. Common salt. Half a drachm or two scruples of this salt dissolved in water, and taken early in a morning for some length of time have caused worms to be voided in considerable quantities, in many instances.

Calomel. Submurias Hydrargyri, Ph. Ed. (See Vol. I. p. 135.) Calomel Submuriate of Quick-silver. Notice has been already taken of the vermifuge powers of this preparation of quicksilver under CATHARTICS. When used with the intention of bringing away worms, it is often joined with jalap, gamboge and other purgatives. As a vermifuge it is prescribed too indiscriminately and too freely by some practitioners; and it is certain that in many delicate and irritable children, and especially in such as are predisposed to pulmonary and scrophulous affections, the repeated use of this and other mercurials, has an injurious effect. In such cases, anthelmintics derived from the vegetable kingdom are to be preferred.

Ferrum. Iron. Various preparations of this metal, such as the rubigo ferri, the ferrum vitriolatum (Sulphas Ferri, Ph. Ed.) the ferrum tartarifatum, &c. have been given in worm-cases, by different practitioners, and with considerable advantage. Alone, however, they seldom prove adequate vermifuge remedies, since there are few constitutions which can bear them in quantities sufficient for the destruction and expulsion of worms. On the whole, the preparations of iron succeed best as anthelmintics, when exhibited in combination with bitters and other tonics, after the previous use of the geoffræa, jalap, scammony, gamboge, and other purgative worm medicines.

Stannum. Tin. On the recommendation of the late *Dr. Alston*, of Edinburgh, the stannum pulveratum and tin filings, have been frequently prescribed in cases of tænia and gourd-worm, mixed up with honey or treacle, and given in doses of two or three drachms in a morning, fasting. (*Thesaur. Med.* p. 281.) This remedy acts mechanically, and requires the assistance of cathartic medicines.

THE END.

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